

Chapter 8:

INSTITUTIONAL LEGAL AND POLICY FRAMEWORKS

8.1 Introduction

Climate change is a cross-cutting issue and therefore requires special institutional and governance arrangements. Currently in many of the African countries, climate change issues are coordinated by institutions that are responsible for either the environment or agriculture. So as to take on board all concerns and to ensure climate change issues are taken on board across all sectors, most countries have set up inter-ministerial climate change coordinating committees. This has resulted in arrangements that have contributed to the dissemination of climate change information to other sectors and institutions. Climate change is now being increasingly well linked to development planning, finance and sector institutions.

The regime enjoys one of the highest level of participation in the international environmental arena among states and stakeholder organisations, including non-governmental organisations, intergovernmental organisations, UN bodies and specialized agencies. Parties to the climate change regime are organized into a number of different groups and coalitions. The [African Group](#) of Negotiators, an active participant in the UNFCCC negotiations, speaks on behalf of the combined concerns of countries located within the African continent and is the only UN regional group serving as an active negotiating coalition, providing an important forum for African countries to pursue their specific interests, especially on issues where their perspective may differ from that of the wider G-77 and China. (Cf. UNEP *Guide for Negotiators of Multilateral Environmental Agreements*, <http://www.unep.org/DEC/docs/Guide%20for%20Negotiators%20of%20MEAs.pdf>)

8.1.1 Institutional framework of the UNFCCC process

International oversight and implementation of the climate regimes is only possible through an array of institutions under the UNFCCC and the Kyoto regimes (F Yamin and J Depledge, 2004). Figure 8.1 shows an overview of the Convention bodies, the supporting bodies and their respective roles. The Conference of Parties (COP) is the supreme body of UNFCCC, which keeps under regular review the implementation of the Convention and any related legal instruments that the Conference of the Parties may adopt, and shall make, within its mandate, the decisions necessary to promote the effective implementation of the Convention. In order to create a robust framework which – at least to some degree – creates legal certainty and supports the rule of law amongst nations, binding commitments appear of utmost importance.

The intergovernmental process on climate change, since 1995, revolves around the annual meetings of the COP and, since 2005, the CMP (both bodies meet in conjunction). The Subsidiary Body for Implementation (SBI) and the Subsidiary Body for Scientific and Technological Advice (SBSTA), two permanent bodies, support the COP and CMP on matters relating to implementation and on scientific and technological issues respectively. The UNFCCC Secretariat is established under Article 8 UNFCCC. Its mandate is inter alia to make arrangements for sessions of the Conference of the Parties and its subsidiary bodies established under the Convention and to provide them with services as required; to compile and transmit reports submitted to it; to facilitate assistance to the Parties, particularly developing country Parties etc. The Expert Group of Technology Transfer (EGTT) supports SBI and SBSTA on technology issues. The EGTT is made up of 19 Party-nominated experts, allowing regional balance and

three observers from relevant intergovernmental organizations.

The Global Environment Facility (GEF) is assigned by the COP to operate the financial mechanism. The GEF provides financial support to developing countries and economies in transition and manages two special funds the Least Developed Countries Fund (LDCF) and the Special Climate Change Fund (SCCF).

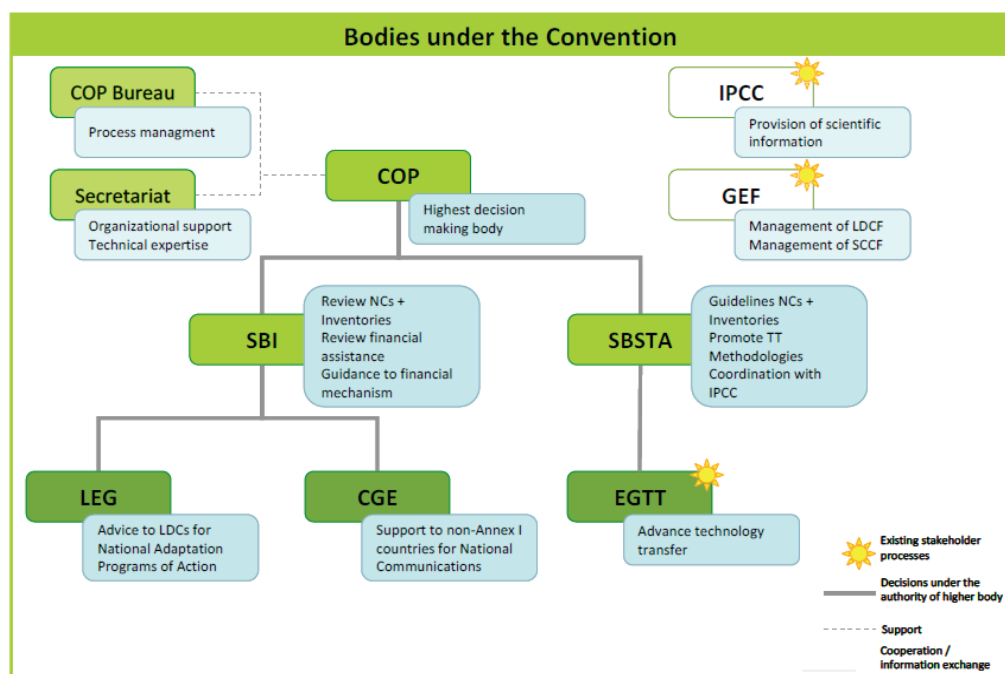


Figure 8.1: Institutional Framework of the Climate Change Convention Process (Source: Charlotte Streck et al., 2010: Private Sector and the UNFCCC Options for Institutional Engagement, Final Report, 2010)

In a note entitled 'Legal considerations relating to a possible gap between the first and subsequent commitment periods' the UNFCCC secretariat has undertaken an assessment of the possible legal consequences (cf. <http://unfccc.int/resource/docs/2010/awg13/eng/10.pdf>). The rules for adopting new protocols under the UNFCCC very much correspond with the procedures for amendments to the Convention and the Kyoto Protocol. The mandate of the COP to amend the UNFCCC and the Kyoto Protocol, or adopt a new legal instrument that either supplements or replaces the Kyoto Protocol is broadly limited by the UNFCCC's objective and guiding principles. The UNFCCC, however, only provides a general framework to combat climate change. Parties have a responsibility to protect the climate system in accordance with their common but differentiated responsibilities and respective capabilities.

Access to scientific and technical information is absolutely critical for a well functioning climate change regime. The Intergovernmental Panel on Climate Change (IPCC) has become the most predominant source of scientific and technical information and analysis to the climate change regime, with both COP decisions and the Kyoto Protocol referring to its scientific and technical inputs (F Yamin and J Depledge 'The International Climate Change Regime. A Guide to Rules, Institutions and Procedures' (2004), 464ff.). The IPCC was established by the [United Nations Environmental Programme \(UNEP\)](#) and the [World Meteorological Organisation \(WMO\)](#) in 1988 and assesses the scientific, technical and socio-economic information relevant for the understanding of human-induced climate change, its potential impacts and options for mitigation and adaptation. In 2007 the IPCC and Albert Arnold (Al) Gore Jr. were awarded with the Nobel Peace Prize for their efforts to build up and disseminate greater knowledge about man-made climate change and to lay the foundations for the measures that are needed to

counteract such change.

The IPCC consists of three Working Groups: The IPCC Working Group I (WG I) assesses the physical scientific aspects of the climate system and climate change. The main topics assessed by WG I include: changes in greenhouse gases and aerosols in the atmosphere; observed changes in air, land and ocean temperatures, rainfall, glaciers and ice sheets, oceans and sea level; historical and paleoclimatic perspectives on climate change; biogeochemistry, carbon cycle, gases and aerosols; satellite and other data; climate models; climate projections, causes and attribution of climate change (http://www.ipcc.ch/working_groups/working_groups.shtml).

The WG I Technical Support Unit, which manages the organisational and administrative activities of the Working Group, is hosted by the University of Berne, Switzerland and funded by the Government of Switzerland (<https://www.ipcc-wg1.unibe.ch/>).

The IPCC Working Group II (WG II) assesses the vulnerability of socioeconomic and natural systems to climate change, negative and positive consequences of climate change, and options for adapting to it. It also considers the relationship between vulnerability, adaptation and sustainable development. The assessed information is considered by sectors (water resources; ecosystems; food and forests; coastal systems; industry; human health) and regions (Africa; Asia; Australia and New Zealand; Europe; Latin America; North America; Polar Regions; Small Islands). In its reports, Working Group II elaborates on the scientific, technical, environmental, economic and social aspects of the vulnerability (sensitivity and adaptability) to climate change of, and the negative and positive consequences for, ecological systems, socioeconomic sectors and human health, with an emphasis on regional, sectoral and cross-sectoral issues. The WG II Technical Support Unit is housed at the [Carnegie Institution for Science](#) in Stanford, California, USA (<http://www.ipcc-wg2.gov/>).

The IPCC Working Group III (WG III) assesses options for mitigating climate change through limiting or preventing greenhouse gas emissions and enhancing activities that remove them from the atmosphere. The main economic sectors are taken into account, both in a short-term and in a long-term perspective. The sectors include energy, transport, buildings, industry, agriculture, forestry, waste management. WG III analyses the costs and benefits of the different approaches to mitigation, considering also the available instruments and policy measures. The approach is more and more solution-oriented. The [IPCC WG III](#) Technical Support Unit is housed at the [Potsdam Institute for Climate Impact Research](#) in Potsdam, Germany (<http://www.ipcc-wg3.de/>).

The Task Force on National Greenhouse Gas Inventories (TFI) was established by the IPCC to oversee the IPCC National Greenhouse Gas Inventories Programme (IPCC-NGGIP). The core activity is to develop and refine an internationally-agreed methodology and software for the calculation and reporting of national GHG emissions and removals and to encourage its use by countries participating in the IPCC and by parties of the United Nations Framework Convention on Climate Change (UNFCCC). The NGGIP also established and maintains an Emission Factor Database. The IPCC National Greenhouse Gas Inventories Programme was managed from 1991 by the IPCC WG I in close collaboration with the Organisation for Economic Co-operation and Development (OECD) and the International Energy Agency (IEA) until its transfer to the IPCC's Task Force on National Greenhouse Gas Inventories (TFI) based in Japan in 1999 (<http://www.ipcc-nggip.iges.or.jp/>).

One of the main IPCC activities is the preparation of comprehensive assessment reports about the state of scientific, technical and socioeconomic knowledge on climate change, its causes, potential impacts and response strategies. Since its inception in 1988 the IPCC has prepared four multivolume assessment reports. The 5th IPCC Assessment Report (AR5) is expected to be published between 2013 and 2014. The Task Group on Data and Scenario Support for Impact and Climate Analysis (TGICA) facilitates distribution and application of climate change related data and scenarios (<http://www.ipcc.ch/activities/activities.shtml#tabs-4>).

Under the Kyoto Protocol, the highest governing body is the CMP and the Protocol provides national means to comply with the targets. The Kyoto Protocol provides for three market-based mechanisms: International Emission Trading (trading of emission rights between Annex I countries), Joint Implementation (JI) (project implementation in Annex I countries) and the Clean Development Mechanism (CDM) (project implementation in non-Annex I countries). The project based mechanisms are each governed by their own institutional setup, which is similar, but not identical in structure.

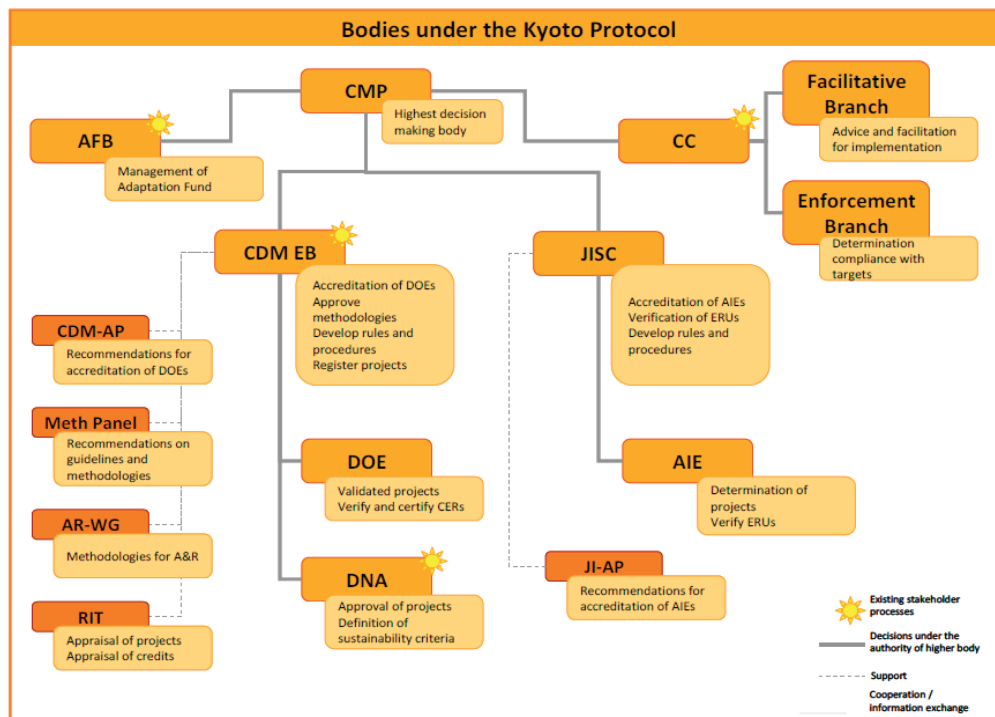


Figure 8.2: Institutional Framework of the Kyoto Protocol of the Climate Change Convention (Source: Charlotte Streck et al., 2010: *Private Sector and the UNFCCC Options for Institutional Engagement, Final Report*, 2010)

The CDM is supervised by the CDM Executive Board (CDM EB), which prepares reports and technical papers for review and adoption by the CMP, as well as registering projects and accrediting the Designated Operational Entities (DOE). The DOEs are independent auditors which assess whether a project is in line with the eligibility criteria (validation), whether the project has led to a reduction in greenhouse gases (verification) finally the DOE certifies the emission reduction (certification). Each country participating in the CDM mechanism creates a Designated National Authority (DNA) to approve specific projects. Different working groups and panels support the CDM EB. The Methodologies Panel (Meth Panel) assesses new methodologies for baselines and develops guidelines. The CDM Accreditation Panel (CDM-AP) prepares the decision-making of the CDM EB regarding the accreditation of DOEs. The Afforestation and Reforestation Working Group (AR WG) makes recommendations for new baselines concerning afforestation and reforestation. The Registration and Issuance Team (RIT) prepares appraisals of requests for registration and the issuance of Certified Emission Reductions (CERs). The Joint Implementation Supervisory Committee (JISC) supervises the JI, verifies Emission Reduction Units (ERUs), develops rules and procedures and accredits the Accredited Independent Entities (AIEs). The Joint Implementation Accreditation Panel (JI-AP) submits proposals to the JISC regarding the Accreditation of AIEs. Private project participations are represented through the JI Action Group and the Project Developer's Forum.

8.1.2 Future Institutional Structure of the Climate Change Convention

Governments are now negotiating a new and more ambitious international framework and take into consideration the vast experience that has been gathered since the 1990s to be reflected in any new international framework. Attempts are being made within the intergovernmental process to slowly complement the purely top-down approach of the past by a bottom-up approach.

Copenhagen did not deliver certainty on the future architecture of the climate regime, it has a weak legal status but nonetheless provides political guidance and proposes a number of new bodies and mechanisms, which are included in the current negotiating texts. At the most recent negotiations (June 2010), the two *ad hoc* working groups negotiating a future climate change regime—the Ad Hoc Working Group on Long-term Cooperative Action under the Convention (AWG-LCA) and the Ad Hoc Working Group on Further Commitments for Annex I Parties under the Kyoto Protocol (the AWG-KP) — provided texts on the status of their discussions, which provide further information on the possible future climate regime. The potential institutional architecture, where win-win opportunities could exist, by enhancing the engagement of the private sector are summarized in the Figure 8.3. The timely and more effective engagement of the private sector will be a critical factor in achieving real and lasting success. The private sector—with its technical know-how and expertise—will be essential for any successful implementation of the mechanisms emerging in any future international climate agreement. This includes, among others, the implementation of NAMAs and REDD+ activities, the provision of finance, development and deployment of technology, assisting in MRV and certification of results, and direct participation in market-based mechanisms created by, or as a result of, the international climate regime.

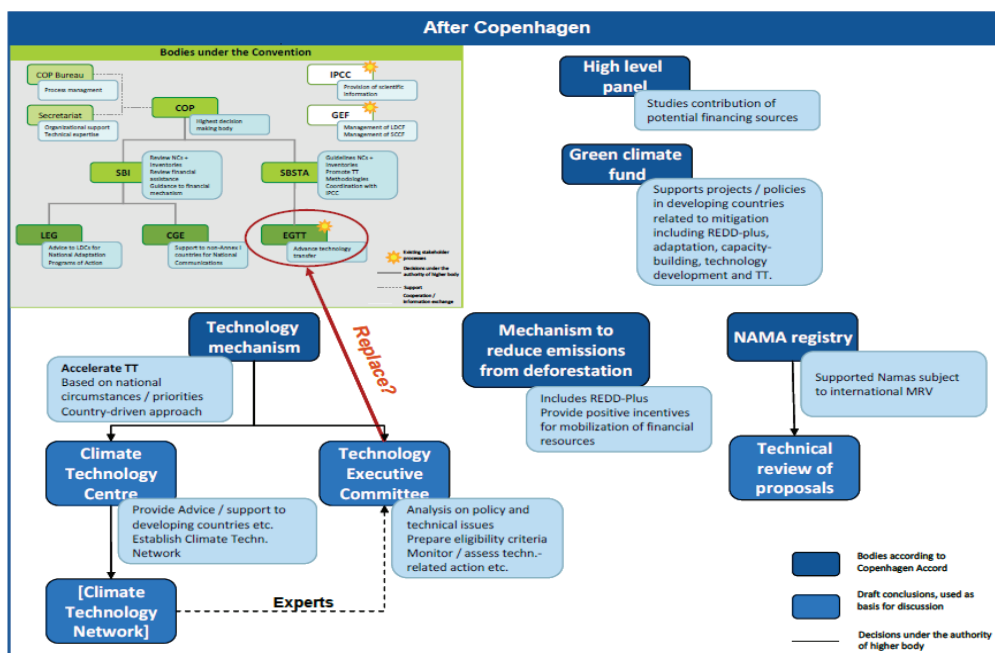


Figure 8.3: Future Potential Institutional Structure of the Climate Change Convention (Source: Charlotte Streck et al., 2010: *Private Sector and the UNFCCC Options for Institutional Engagement, Final Report, 2010*)

The **High Level Panel** may be tasked to study the contribution of the potential sources of revenue, including alternative sources of finance to meet the goal of mobilising 100 Billion USD by 2020 to address investments needs for climate mitigation and adaptation in developing countries. The Panel should therefore look at the *policy and investment conditions needed* to direct finance towards these countries.

The **Green Climate Fund** is likely to support projects, policies and programmes that enable developing countries to transition to a low-carbon economy. It is likely that the governance structure will be similar to those of the existing finance mechanism under the COP, the Climate Investment Funds of the World Bank, or some hybrid model.

The AWG-LCA **Technology Mechanism** has been proposed and endorsed by the Copenhagen Accord to support the objective of acceleration of clean technology development and deployment which is central to addressing climate change. The “Ad-hoc working group on long-term cooperative action” (AWG-LCA) of the UNFCCC has elaborated the functions and structure of this potential mechanism but many details require clarification and definition.

The **Technology Executive Committee** is expected to set strategic objectives of the Technology Mechanism and advises on technical issues.

NAMAs: Paragraph 1 (b) (ii) of the Bali Action Plan calls for “*Nationally appropriate mitigation actions’ by developing country Parties in the context of sustainable development, supported and enabled by technology, financing and capacity building, in a measurable, reportable and verifiable manner.*” The Copenhagen Accord mentions both the creation of a NAMA registry and ideas on the MRV of NAMAs. The Copenhagen Accord states that supported actions are to be subject to international MRV, while unilateral actions that do not receive international support are subject to a national MRV process.

8.2 Policy and Legal Framework

This section aims to identify the policy and regulatory frameworks necessary for addressing climate change at international, regional and national levels. The complexity of climate change involves a diverse range of institutions and legal regimes (Robert Keohane and David Victor ‘The Regime Complex for Climate Change’ (2011) 9 Perspective on Politics). This chapter will concentrate on the UN legal regime, some Multilateral Environmental Agreements (MEAs), the regime of the World Trade Organisation as well as the African Union and some Regional Economic Communities (RECs) on the African continent.

As a point of departure it shall be stated that one of the major natural resource implications of climate change is that human populations – and law – will have to adapt to major shifts. More than three decades ago a legal expert already wrote, in the context of climate change:

While one function of law is to give stability to institutions and predictability to the results in action, often the strength of law will lie not in immutability but in capacity for change and flexibility in the face of new forces (Trelease, 1977).

Also in the words of Trelease “we would be wise to plan for the unpredictable” (Trelease, 1977). It is expected that climate change will generate significant impact on national, regional and global economies; and it is not unlikely that this will result in increased local and international conflict (Scholtz, 2010). This also applies with a view to the interconnectedness and interdependence of water, energy, national welfare and international economies, as climate change progresses. In its 2007 Summary for Policymakers, IPCC Working Group II reflects on impacts, adaptation and vulnerability as follows:

Africa is one of the most vulnerable continents to climate variability and change because of multiple stresses and low adaptive capacity (IPCC, 2007).

In view of the above, rights need to be adjusted and responsibilities distributed with greater fairness in future - among communities, both globally and domestically. In the same context political devotion, access to information and broad public participation are just as important for the improved realisation of human rights, as development of quality climate-change related education, as well as high standard interdisciplinary research. In order to become a winner - rather than a loser of climate change – African countries need to strengthen their respective policies, train more highly skilled experts in this field in order to meet future demands and to be in the position to negotiate international interests in a growing and complex, knowledge-based global economy (Ruppel, 2011b). Realistically, the challenge is one of maximising benefits and minimizing costs and burdens with a view to mitigating what can fairly be regarded as a dangerous development for Africa's prospects and future.

As a global problem, climate change calls for local and multilateral solutions. Differentiation through emissions targets and actions, and additional multilateral obligations on policies and measures in the climate sector is the key to addressing leakage and competitiveness concerns. A scientific consensus is emerging that substantial global reduction in greenhouse gas emissions will be required to prevent an extreme increase in average temperature. It is furthermore acknowledged that a 'business-as-usual scenario' would have disastrous consequences for future generations. In consequence, developed *and* developing countries will have to build low carbon economies, at least in the long run, recognizing the importance of principles such as equity and common but differentiated responsibilities and respective capabilities. This will require efforts at various levels, including substantive changes in life-style, in particular in industrial countries. No less important is, however, major investment in low carbon technology and modern technology transfer to and capacity building in Africa (Ohlendorf and Gerstetter, 2009). This in turn will require a shared vision for long-term cooperation action, as has been adopted at COP 16 in Cancún (FCCC/CP2010/7/Add.1).

8.2.1 International Law

International law has developed rapidly over the past few decades, especially since the dawn of the UN, when rules and norms regulating activities carried on outside the legal boundaries of nations were developed. Numerous international agreements – bilateral, regional or multilateral in nature – have been concluded and international customary rules, as evidence of a general practice accepted as law, have been established.

General rules of public international law include rules of customary international law, supported and accepted by a representatively large number of states. The notion of *international agreement* primarily refers to *treaty* in the traditional sense, i.e. international agreements concluded between states in written form and governed by international law, but it also includes conventions, protocols, covenants, charters, statutes, acts, declarations, concords, exchanges of notes, agreed minutes, memoranda of understanding, and agreements. Notably, not only agreements between states, but also those with the participation of other subjects of international law, e.g. international organisations, are covered by

the term *international agreement*. In general, international agreements are binding upon states if the consent to be party to a treaty is expressed by a signature followed by ratification; or by accession, where the state is not a signatory to a treaty; or by declaration of succession to a treaty concluded before such a state existed.

The sources of international law in general are listed in Article 38 of the Statute of the International Court of Justice (ICJ), the principal judicial organ of the United Nations:

1. The Court, whose function is to decide in accordance with international law such disputes as are submitted to it, shall apply:
 - b. International conventions, whether general or particular, establishing rules expressly recognised by the contesting states;
 - c. International custom, as evidence of a general practice accepted as law;
 - d. The general principles of law recognised by civilised nations;
 - e. Subject to the provisions of Article 59, judicial decisions and the teachings of the most highly qualified publicists of the various nations, as subsidiary means for the determination of rules of law...

Considering that Article 38 of the Statute of the ICJ was first drafted in 1920, these provisions do not longer reflect all the sources of today's international law. New developments in respect of sources of law have to be considered in addition to those recognised in Article 38.

The 1992 United Nations Conference on Environment and Development (UNCED) in Rio de Janeiro reaffirmed the Declaration of the United Nations Conference on the Human Environment, adopted at Stockholm in 1972, seeking to build upon it, with the goal of establishing a new and equitable global partnership through the creation of new levels of cooperation among States, key sectors of societies and people, working towards international agreements which respect the interests of all and protect the integrity of the global environmental and developmental system, recognizing the integral and interdependent nature of the Earth. It proclaims first and foremost that human beings are at the centre of concerns for sustainable development. They are entitled to a healthy and productive life in harmony with nature (Principle 1). Moreover, states have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental and developmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction (Principle 2). Thirdly, the right to development must be fulfilled so as to equitably meet developmental and environmental needs of present and future generations (Principle 3).

Governments, international organizations and other bodies should promote synergies at the national level between the United Nations Framework Convention on Climate Change and its Kyoto Protocol and the Convention on Biological Diversity, when implementing climate-change activities and their relation to the conservation and sustainable use of biodiversity. Such cooperation between the Convention on Biological Diversity and all relevant international conventions, organizations and bodies, can strengthen and build on existing cooperative arrangements to enhance synergies and reduce inefficiencies in a manner consistent with their respective mandates, governance arrangements and agreed programs, within existing resources. Such synergies between international environmental instruments, and the secretariats of the Convention on Biological Diversity, the United Nations Convention to Combat Desertification and the United Nations Framework Convention on Climate Change can only be mutual beneficial.

Climate change issues are cross-sectoral and thus, a broad range of international conventions become relevant with regard to climate change. The most relevant international agreements binding upon States

and relating to climate change are those which were developed during the 1992 Rio Conference:

- United Nations Framework Convention on Climate Change (UNFCCC) – www.unfccc.int
- United Nations Convention on Biological Diversity (CBD) - www.cbd.int/
- United Nations Convention to Combat Desertification (UNCCD) - www.unccd.int/

All of the above and the Kyoto Protocol are “treaties” in terms of international law and Article 2.1(a) of the Vienna Convention on the Law of Treaties. Any treaty negotiation lies in the pre-eminence of the concept of state sovereignty. This gives states the right to govern the affairs that occur within their territorial areas. Yet, the UNFCCC and the subsequent Kyoto Protocol can, at the same time be seen as an articulation of how states balance their sovereign rights to follow their own development agenda with their overall responsibilities under international law, including those to avoid harm to areas beyond the limits of their jurisdiction. This means that the conceptuality and international nature of climate change demands that states apply some of their sovereignty by engaging into international cooperation and negotiation in the interest of ‘common concern of humankind’ (UNFCCC, Preamble). Strictly speaking relevant international obligations, such as those embodied in the Rio Declaration, include but are broader than the responsibility to avoid transboundary harm. They include responsibilities to protect ecosystems, eradicate poverty etc.

8.2.1.1 United Nations Framework Convention on Climate Change (UNFCCC)

The UNFCCC allows for the introduction of Protocols to the Convention. The first of these is the Kyoto Protocol. The latter agreement came into force on 16 February 2005. A number of global initiatives are being implemented to assist in the operationalisation of the UNFCCC. For example, the Global Environment Facility (GEF) serves as an operating entity of the UNFCCC financial mechanism and has been supporting the national capacity self-assessment process at national level for some time, among other things. This is aimed at providing countries with an opportunity to articulate their own capacity needs in implementing the UNFCCC, the other two Rio Conventions and other non-Rio Conventions (e.g. chemicals). The ultimate objective of the UNFCCC is to stabilise greenhouse gas concentrations “at a level that would prevent dangerous anthropogenic interference with the climate” (UNFCCC, 2009a). Such a level – and this is generally regarded by developing countries as an integral part of the aforementioned objective - should be reached within a timeframe which allows ecosystems to adapt naturally to climate change, while guaranteeing that food production is not at risk and that development occurs in a sustainable manner.

The Convention is a framework document, identifying two major areas of work required to fight climate change, Mitigation (UNFCCC, 2009b) and Adaptation (UNFCCC, 2009c). Moreover, the Convention as a legal instrument identifies a wide range of measures (see, e.g., the diversity of measures in Article 4.1) to address climate change, which includes mitigation and adaptation, but also other activities such as scientific and technical cooperation, technology transfer, finance etc. The UNFCCC allows any state to become a party, and as at 2011 has 194 Parties, thus making it a global instrument. Within this framework of global participation, actual obligations of parties differ substantially between industrialised and developing countries. The UNFCCC enshrines a number of key principles (Article 3) including the principles of “equity” and “common but differentiated responsibilities and respective capabilities”, Article 3 (1) UNFCCC. Today’s accumulated greenhouse gas emissions originate mainly from over 150 years of carbon-based industrial activity in developed states. Therefore UNFCCC recognizes that all countries have a common responsibility to tackle climate change, but places a heavier burden on industrialised states as fulfillment of their respective historic responsibility for the causes of climate change (Boisson de Chazourne, 2008).

These principles are reflected in the obligations established for developed and developing countries in the Convention, including those relating to mitigation, adaptation, technology transfer, finance as well as communication of information relating to the Convention. The Convention goes further to make

provision for countries in special situations, including particularly vulnerable countries, least developed countries, undergoing transition to a market economy (e.g. Articles 4(4), 4(6), 4(8), 4(9) and 4(10)). Article 4(4) UNFCCC, for instance, states:

The developed country parties (...) shall assist the developing country parties that are particularly vulnerable to the adverse effects of climate change in meeting costs of adaptation to those adverse effects.

In light of the adaptation objective, the UNFCCC commits all members to formulate, implement and update adaptation measures. Article 4.1 sets up common commitments for all Parties. Article 4.2 sets up differentiated mitigation commitments for Annex I Parties. Article 4.3 addresses finance. Article 4.4 addresses additional support for particularly vulnerable countries, which must be read with Article 4.8 which defines vulnerable countries.

A system of grants and loans is set up through the Convention's financial mechanism and is managed by the Global Environment Facility. Industrialised countries agree to share technology with less-advanced nations (Boisson de Chazourne, 2008). Institutions and procedures of the UNFCCC are drawn from the UN system with the Conference of Parties (COP) as the ultimate policy-making body, which in turn is assisted by two subsidiary bodies. The international negotiation process on climate change revolves around the sessions of the COP, which meets every year to review the implementation of UNFCCC (UNFCCC, 2009d). Procedures are governed by the procedural rules included in the UNFCCC itself and the Draft Rules on Procedure even though the latter have never been formally adopted owing to a quarrel over the voting rules. This is why most of the decisions can only be taken by consensus (Depledge and Yamin, 2009).

All Parties have commitments under the UNFCCC (cf. Article 4). While some of these commitments are binding for all Parties, some commitments have been particularly included to address the specific needs of developing countries according to the principle of common but differentiated responsibilities. Annex I Parties are for example subject to specific requirements to demonstrate that they are taking the lead in combating climate change. To this end, Article 4.2 requires them to adopt policies and measures to mitigate climate change by limiting their GHG emissions and enhancing their GHG sinks and reservoirs. Another differentiation occurs with regard to Annex II Parties, which are required to provide financial assistance and facilitate the transfer of technologies to developing countries to help them implement their commitments under the Convention. The group of countries with economies in transition are granted some flexibility in implementing their commitments, to take into consideration recent economic and political developments in their countries.

Commitments for all Parties under the UNFCCC (Article 4.1)

- Prepare and periodically update a national inventory of greenhouse gas emissions and sinks (Article 4.1.(a)).
- Formulate and implement national and, where appropriate, regional programmes to mitigate climate change and facilitate adequate adaptation to climate change (Article 4.1.(b)).
- Promote and cooperate in the development, application and diffusion of technologies, practices and processes that control, reduce or prevent anthropogenic emissions of greenhouse gases (Article 4.1.(c)).
- Promote sustainable management, and promote and cooperate in the conservation and enhancement of sinks and reservoirs of all greenhouse gases (Article 4.1.(d)).
- Cooperate in preparing for adaptation to the impacts of climate change (Article 4.1.(e)).
- Take climate change considerations into account in the relevant social, economic and environmental policies and actions with a view to minimising adverse effects on the economy, on public health and on the quality of the environment (Article 4.1.(f)).
- Promote and cooperate in scientific, technological, technical, socio-economic and other research, systematic observation and development of data archives related to the climate system and intended to further the understanding and to reduce or eliminate uncertainties (Article 4.1.(g)).
- Promote and cooperate in the full, open and prompt exchange of relevant scientific, technological, technical, socioeconomic and legal information related to the climate system and climate change (Article 4.1.(h)).
- Promote and cooperate in education, training and public awareness related to climate change (Article 4.1.(i)).
- Communication to the Conference of the Parties (Article 4.1.(j))

Special Consideration of Developing Countries Interests:

Commitments for developed country Parties and Annex I Parties (Article 4.2)

- Requirement to adopt national policies and measures which demonstrate that developing countries are taking the lead in combating climate change, with the aim of returning emissions to their 1990 levels taking into account the differences in these Parties' starting points and approaches, economic structures and resource bases, the need to maintain strong and sustainable economic growth, available technologies and other individual circumstances, as well as the need for equitable and appropriate contributions by each of these Parties to the global effort regarding that objective (4.2.(a)).
- To this end communicate detailed information on policies and measures as well as on its resulting projected anthropogenic emissions (Article 4.2.(b),(c) and (d))

Commitments for developed country Parties and Annex II Parties (Articles 4.3, 4.4, 4.5 and 4.6)

- Obligation to provide financial resources to enable developing countries to undertake emissions reduction activities under the Convention and to help those particularly vulnerable countries adapt to adverse effects of climate change.
- Taking into account the need for adequacy and predictability in the flow of funds and the

importance of appropriate burden sharing among the developed country Parties, new and additional financial resources must be provided to meet the agreed full costs incurred by developing country Parties in preparing their communications and the agreed full incremental costs of implementing measures that are covered by Article 4.1

- Assistance for the developing country Parties that are particularly vulnerable to the adverse effects of climate change in meeting costs of adaptation to those adverse effects
- Obligation to take all practicable steps to promote, facilitate and finance, as appropriate, the transfer of, or access to, environmentally sound technologies and know-how to other Parties, particularly developing country Parties, to enable them to implement the provisions of the Convention.

Further Commitments (Article 4.9)

According to Article 4.9 “Parties shall take full account of the specific needs and special situations of the least developed countries in their actions with regard to funding and transfer of technology”.

8.2.1.2 The Kyoto Protocol

“The publication of the 2nd IPCC Assessment Report in 1995 made it evident that the actions to combat climate change as outlined in the UNFCCC were insufficient. The Kyoto Protocol was negotiated subsequently. The 3rd IPCC Assessment Report in 2001 made it even further certain that climate change was, indeed, largely man-made and was an impetus to the further development of the Kyoto Protocol that finally came into force in 2005. The Kyoto Protocol shares the objectives and the institutions of the UNFCCC. The major distinction between the two is however that while the UNFCCC only encourages industrialised countries to stabilise greenhouse gas emissions, the Kyoto Protocol obliges them to do so. [...] Just like the UNFCCC, the Kyoto Protocol imposes a heavier burden on developed nations under the principle of “common but differentiated responsibilities”. This group of countries must first and foremost take domestic actions against climate change, but the Kyoto Protocol allows them a certain degree of flexibility in satisfying their emission commitments” (Cf. Von Bassewitz, 2011).

The Kyoto Protocol shares the objectives and the institutions of the UNFCCC. The major distinction between the two is, however, that while the UNFCCC commits industrialised countries to stabilise greenhouse gas emissions, the Kyoto Protocol obliges them to do so. The Convention commits Annex I countries to reduce emissions; it’s just that the reductions were not clearly quantified (though note that Article 4.2 does, if read carefully, require emissions to return to 1990 levels by 2000). Under the Kyoto Protocol, actual emissions have to be monitored: each party must keep a national register to show dealings carried out under the Kyoto Protocol instruments. The secretariat keeps an independent transaction log to verify that operations are consistent with the rules of the Kyoto Protocol. The most important aspect of the Kyoto Protocol is arguably the creation of an aggregate target for the developed countries (Article 3) as well as legally binding and quantified individual targets set out in Annex B. It should also be noted that there are significant commitments for reporting, review, independent assessment and compliance (Articles 5, 7, 8 and 18).

Under the adaptation objective, the Kyoto Protocol, like the UNFCCC, is designed to support countries in adapting to the inevitable effects of climate change and to facilitate the development of techniques that can help increase resilience to climate change impacts. An Adaptation Fund was set up to help with concrete adaptation projects in developing countries. The Adaptation Fund is a “solidarity fund” in which a proportion of the revenue of CDM projects in developing countries is contributed to a fund to assist adaptation projects in other developing countries.

In light of the 3rd IPCC Assessment Report and new emerging science, it became abundantly clear that the measures agreed to in the UNFCCC and the Kyoto Protocol were an inadequate international response to the threats posed by climate change. The results of the Kyoto Protocol were not as expected. It

imposed relatively high costs and generated only humble benefits, while failing to provide a real solution (Olmstead and Stavins, 2006).

Global warming needs to be addressed more efficiently in future (Helm, 2009). Not only that the world's largest greenhouse gas emitter at the time, the US, pulled out of Kyoto in 2003. It has been repeatedly stated that the largest increase in greenhouse gas emissions originates from inter alia China and India, which lack quantitative emission targets under the Kyoto Protocol. This is, however, not fully accurate. India's emissions are considerably less than some other Annex I countries. Moreover, both India and China have per-person emissions lower than the global average. The characterization of India and China as the problem is arguably part of the developed countries effort to shift focus from their failure to reduce emissions and to shift the burden to rapidly developing, but still relatively poor, developing countries.

One of the weaknesses of Kyoto is its division of countries in two annexes, which has reinforced the already existing ideological North-South divide (Beyerlin, 2006; Gosh and Woods, 2009). Annex I countries, however, agreed to quantified reductions in Annex B of the Kyoto Protocol. This is in turn regarded by developing countries as one of its strengths.

Most importantly, however, the Protocol lacks compliance incentives and enforcement mechanisms to deter non-participation and non-compliance (Barrett, 2009; Aldy and Stavins, 2009). Article 18 provides for a compliance mechanism. The efficacy of this mechanism has, however, not been tested while the first commitment period has not been finished. Although UNFCCC and the Kyoto Protocol have made provision for monitoring and compliance, especially for the emission reductions targets of Annex I countries, effective enforcement is so far lacking (Gosh and Woods, 2009), although such mechanism is, at least on paper, among the more detailed and sophisticated one's in the MEAs. Kyoto placed the burden of emission reduction on those states which produce emission-intensive goods, rather than those which import and finally consume these goods. The handicap of this methodology is that wealthier nations can relocate CO₂-intensive production abroad to no-cap locations in order to meet their Kyoto targets. After all, it is the developed countries, principally, that are the importers and final consumers of the majority of emissions intensive goods (although consumption is increasing in many developing countries). The concern is about the off-shoring of emissions and that there is substantial evidence to support this.

The first commitment period in terms of the Kyoto Protocol is restricted to 2012 (Article 3(1), (9) Kyoto Protocol, Articles 15, 17 UNFCCC). It is important for the post-2012 period, that African countries articulate and strengthen their African position in the UNFCCC negotiations. Moreover, it must be ensured that developed countries honour their legally binding commitments for a second and subsequent commitment period. This has been a cornerstone of the African position. The past years have already shown that the complexity of climate change and the need for "common but differentiated responsibilities" have had impacts on the international negotiations. In fact, each negotiation round has become more complex: The 2007 COP 13 in Bali (Action Plan) was considered a leap forward, the 2009 COP 15 in Copenhagen was the culmination of two years of intense negotiations ending in the Copenhagen Accord,¹⁵ which itself was said to be more of a political decision as opposed to a legally binding agreement. The Copenhagen Accord was a document negotiated by a small group of states outside the UN procedure (and arguably in tension with, if not in violation of, normal UN procedure) and was taken note of and not adopted by the COP. It is not formally an outcome of the UNFCCC and the UNFCCC Secretariat has clarified that it has no legal status in the UNFCCC regardless of whether Parties associated themselves with it.

The 2010 COP 16 in Cancun approved a set of decisions anchoring national mitigation pledges made under the Copenhagen Accord, and taking initial steps to strengthen finance, transparency and other elements of the multilateral climate framework. At the upcoming 2011 COP 17 in Durban, parties will have to come up with a way forward in finally setting a timeframe for the peaking of global emissions

¹⁵ Decision of the Conference of the Parties 2/CP.15. It has to be noted that the Conference of the Parties, at its fifteenth session, only "took note" of the Copenhagen Accord of 18 December 2009 by way of decision 2/CP.15. Due to the fact that the decision has not been adopted, the Copenhagen Accord is not legally binding. However, the total number of Parties that have expressed their intention to be listed as agreeing to the Accord is 141, cf < http://unfccc.int/meetings/copenhagen_dec_2009/items/5262.php> (accessed 27 October 2011).

and a global emissions goal. In order to achieve such goals, incentives for developing countries to limit their emissions need to be scaled-up and international technology cooperation between industrialised and developing countries needs to be improved (Von Bassewitz, 2011).

In the course of 2010 COP 16 in Cancun understanding has been reached, which – building on the Bali Road Map¹⁶ and the Copenhagen Accord¹⁷ reflects that the Members to the UNFCCC and the Kyoto Protocol respectively, have taken up the issue of climate justice. Three decisions have resulted from the Cancun Conference: One decision by the Conference of the Parties to the UNFCCC¹⁸ and two decisions by the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol¹⁹. The reduction greenhouse gas emissions and the support for developing nations to deal with climate change are at the core of the Cancun understanding. In order to advance action regarding the aim of the reduction of greenhouse gas emissions in a mutually accountable way, national plans are formally captured at international level under the banner of the United Nations Framework Convention on Climate Change. Support for developing nations is provided for in the Cancun decisions and includes finance, technology and capacity-building support. The financial, technology and capacity-building support for developing countries decided in Cancun is to be realised through various mechanisms: Nationally appropriate mitigation actions (NAMA); reducing emissions from deforestation and forest degradation (REDD+); the Clean Development Mechanism (CDM); the Cancun Adaptation Framework (CAF); the Technology Mechanism; and the Green Climate Fund.

Already in September 2008, the UN-REDD Programme (United Nations Collaborative initiative on Reducing Emissions from Deforestation and forest Degradation in developing countries) was launched to assist developing countries prepare and implement national REDD+ strategies.

The Programme currently has 35 partner countries spanning Africa, Asia-Pacific and Latin America, of which 14 are receiving support to National Programme activities. These 14 countries are: Bolivia, Cambodia, Democratic Republic of the Congo (DRC), Ecuador, Indonesia, Nigeria, Panama, Papua New Guinea, Paraguay, the Philippines, Solomon Islands, Tanzania, Viet Nam and Zambia. To-date, the UN-REDD Programme's Policy Board has approved a total of US\$59.3 million for National Programmes in these 14 partner countries. These funds help to support the development and implementation of national REDD+ strategies.

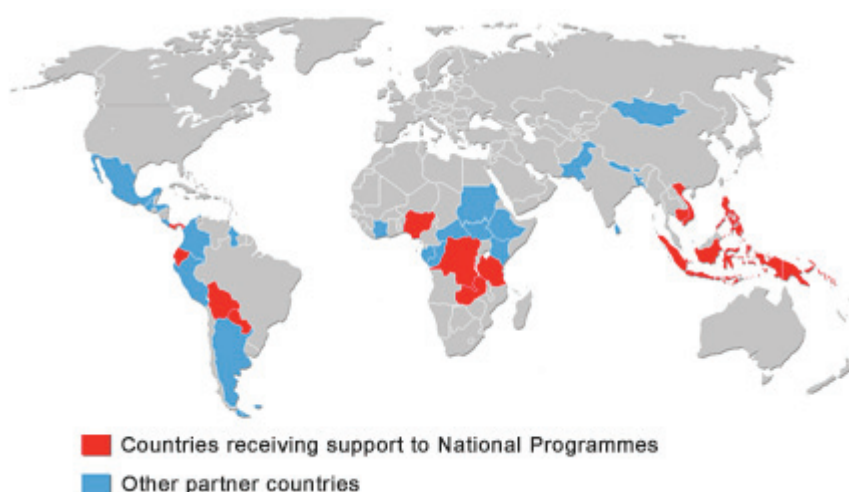
16 The Bali Road Map emerged from the 2007 Bali Climate Change Conference and includes the Bali Action Plan (Decision 1/CP.13), which launched a "comprehensive process to enable the full, effective and sustained implementation of the Convention through long-term cooperative action" along with a number of other decisions and resolutions.

17 Agreed upon by the UNFCCC Conference of the Parties, in Copenhagen on 18 December 2009 by way of Decision 2/CP.15.

18 Decision 1/CP.16 *The Cancun Agreements: Outcome of the work of the Ad Hoc Working Group on Long-term Cooperative Action under the Convention*.

19 Decision 1/CMP.6 *The Cancun Agreements: Outcome of the work of the Ad Hoc Working Group on Further Commitments for Annex I Parties under the Kyoto Protocol at its fifteenth session*; and Decision 2/CMP.6 *The Cancun Agreements: Land use, land-use change and forestry*.

Figure 8.4 UN-REDD Programme presence



Source: UN-REDD Programme

The Cancun decisions stress that national legal reform and related local development are necessary, since domestic forest management often involves various laws, regulations and stakeholder participatory processes. Competing governance structures and interests can often give rise to conflict and create barriers to REDD+ initiatives. In this regard, the Cancun requested developing countries to undertake several institutional reforms for REDD+ including national strategies or action plans; a national forest reference emission level; a transparent national forest monitoring and reporting system; and a system for providing information on prescribed safeguards (Mason-Case, 2011). REDD+ related activities must be implemented in phases beginning with the development of national action plans and capacity building. National action plans must ensure the full and effective participation of relevant stakeholders and consider land tenure and forest governance amongst others. Gender related issues and the rights of indigenous peoples must be taken into account.

Nationally appropriate mitigation actions (NAMAs) are voluntary commitments that non annex I parties have set up for proposal to the UNFCCC. These actions should include every possible activity aimed at reducing or limiting GHG emissions. NAMAs mainly provide guidance for the future mitigation policies in the countries. NAMAs are an important mechanism for developing countries to contribute to global mitigation efforts in nationally appropriate ways. The concept of NAMAs has emerged during the Bali Action Plan as part of the Bali Road Map that was agreed at the United Nations Climate Change Conference in Bali in December 2007. At the Copenhagen Climate Conference in 2009 it was agreed that the concept of NAMAs should be retained, adding that NAMAs would be subject to international measurement, reporting and verification in line with guidelines adopted by the Conference of the Parties. The Cancun decisions confirm that nationally appropriate mitigation actions are increasingly the primary vehicle for developing countries mitigation efforts. Developing countries are expected to improve the content and frequency of national communications, including inventories, and to create comprehensive low-carbon sustainable development strategies (Cf. UNFCCC, Draft decision -/CP.16 (29 Nov - 10 Dec 2010) Art. III.B.60-62, 65).

As of March 2011, 48 countries (Afghanistan, Algeria, Antigua and Barbuda, Argentina, Armenia, Benin, Bhutan, Botswana, Brazil, Cambodia, Cameroon, Central African Republic, Chad, Chile, China, Colombia, Republic of Congo, Costa Rica, Côte d'Ivoire, Ethiopia, Eritrea, Gabon, Georgia, Ghana, India, Indonesia,

Israel, Jordan, Madagascar, Maldives, Marshall Islands, Mauritius, Mauritania, Mexico, Mongolia, Morocco, Papua New Guinea, Peru, Republic of Korea, Republic of Moldova, San Marino, Sierra Leone, Singapore, South Africa, Tajikistan, Macedonia, Togo and Tunisia) have submitted NAMAs to the UNFCCC (cf. UNFCCC Document FCCC/AWGLCA/2011/INF.1).

The Clean Development Mechanism (CDM) was established in 1997 by Article 12 of the Kyoto Protocol to assist developing (non Annex I) countries in achieving sustainable development and in contributing to the ultimate objective of the UN Framework Convention on Climate Change (UNFCCC), and to assist the industrialized countries (Annex I) in achieving compliance with their quantified emission limitation and reduction commitments under the Kyoto Protocol.

The Cancun understanding establishes a number of substantial work programmes for ameliorative guidelines and methodologies to simplify and facilitate access and to provide for a framework for the post-2012 period. The envisaged reforms of the will have to be conducted in consultation with designated national authorities and necessitate parallel legal and institutional changes in host countries on a national and local level (Mason-Case, S., 2011: The Cancun Agreements and Legal Preparedness for Climate Change in Developing Countries, *Sustainable Development Law on Climate Change; Legal Working Paper Series* 06 http://www.idlo.int/Publications/6_MasonCaseSarah_TheCancunAgreementsandLegalPreparednessforClimateChangeinDevelopingCountries.pdf (accessed 29 October 2011)).

The Cancun Adaptation Framework (CAF) has been adopted in Cancun. The Parties emphasise that adaptation must be addressed with the same level of priority as mitigation. The CAF is the result of three years of negotiations on adaptation under the AWG-LCA (Ad hoc Working Group on Long-term Cooperative Action under the Convention) that had followed the adoption of the Bali Action Plan, which sought to enable the full, effective and sustained implementation of the Convention through long-term cooperative action, now, up to and beyond 2012.

The objective of the CAF is to enhance action on adaptation, including through international cooperation and coherent consideration of matters relating to adaptation under the UNFCCC. Ultimately enhanced action on adaptation seeks to reduce vulnerability and build resilience in developing country Parties, taking into account the urgent and immediate needs of those developing countries that are particularly vulnerable.

The Technology Mechanism has been introduced by Cancun in order to achieve increased action on technology development and transfer, including research and development, demonstration, deployment, and diffusion. This is to be realised by means of facilitating actions on those objectives through cross-sectoral and country-to-country network partnerships.

The establishment of the Green Climate Fund has been suggested by the Copenhagen Accord. This suggestion was again taken up in Cancun. The Green Climate Fund is designed as a long-term funding arrangement designated as an operating entity of the financial mechanism of the Convention under Article 11 of the UNFCCC. The Green Climate Fund will function under the guidance of, and be accountable to the Conference of the Parties (COP). Projects, programmes, policies and other activities in developing countries will be supported by the Green Climate Fund using thematic funding windows. A Transitional Committee of 40 members has been established to design the details of the fund. It is expected that the designing process of the Green Climate Fund will be concluded at the forthcoming Conference of the Parties in December 2011 in Durban.

8.2.1.3 United Nations Convention on Biological Diversity (CBD)

The Convention on Biological Diversity (CBD) entered into force on 29 December 1993. It has 3 main objectives:

1. The conservation of biological diversity
2. The sustainable use of the components of biological diversity

3. The fair and equitable sharing of the benefits arising out of the utilization of genetic resources

It is now widely recognized that climate change and biodiversity are interconnected. Biodiversity is affected by climate change, with negative consequences for human well-being, but biodiversity, through the ecosystem services it supports, also makes an important contribution to both climate-change mitigation and adaptation. Consequently, conserving and sustainably managing biodiversity is critical to addressing climate change. According to the Millennium Ecosystem Assessment, climate change is likely to become one of the most significant drivers of biodiversity loss by the end of the century. Climate change is already forcing biodiversity to adapt either through shifting habitat, changing life cycles, or the development of new physical traits. Conserving natural terrestrial, freshwater and marine ecosystems and restoring degraded ecosystems (including their genetic and species diversity) is essential for the overall goals of both the CBD and UNFCCC because ecosystems play a key role in the global carbon cycle and in adapting to climate change, while also providing a wide range of ecosystem services that are essential for human well-being and the achievement of the Millennium Development Goals (MDGs). Biodiversity can support efforts to reduce the negative effects of climate change. Ecosystem-based adaptation must integrate the use of biodiversity and ecosystem services into an overall adaptation strategy that can be cost-effective and generate social, economic and cultural co-benefits and contribute to the conservation of biodiversity (CBD, 2011)

8.2.1.4 United Nations Convention to Combat Desertification (UNCCD)

The United Nations Conference on Environment and Development (UNCED), held in Rio de Janeiro in 1992 called on the United Nations General Assembly to establish an Intergovernmental Negotiating Committee (INCD) to prepare, by June 1994, a Convention to Combat Desertification (UNCCD), particularly in Africa. Desertification is land degradation in drylands, resulting from various factors, including climatic variations and human activities. According to the Millennium Ecosystem Assessment (2005), populations in drylands live under the worst economic conditions. Drylands have the lowest GDP per capita and the highest infant mortality rates. Soil degradation in drylands exacerbates the problem even more. The decline in the fertility of land reduces crop production and additional income sources. Land degradation can also trigger a cycle of environmental degradation, impoverishment, migration and conflicts, often also putting the political stability of affected countries and regions at risk. Increased attention to the linkage of land and soil to climate change not only enriches the substantive and conceptual debates on effective means for carbon sequestration. It also provides a new and a highly interesting platform for developing countries to enter into the adaptation and mitigation agendas, considering that for many of them soil is the single most important natural resource. One concrete way forward could be to expand the coverage of the Clean Development Mechanism towards agricultural land use, to include projects focusing on carbon sequestration in soil (UNCCD, 2007).

8.2.1.5 Other climate change related regimes

Apart from the aforementioned, there are of course still other international law regimes that enfold implications of climate change. Such has the Vienna Convention on Ozone Depletion and the Montreal Protocol already in the 1980s taken a series of effective steps phase out the global production and consumption of ozone depleting substances. The complex relationship between ozone depleting substances and greenhouse gasses resulted in the fact, that both regimes (at least until recently) acted largely in independence. However, the 1987 Montreal Protocol and successor agreements are not only regarded as highly successful examples of international environmental regulatory cooperation, there are also lessons to be learned from the ozone layer experience for the case of climate change. Moreover, the Montreal Protocol has made a substantial commitment to climate goals, and there are substantial proposals on the way to increase this. “The Montreal Protocol is widely considered one of the world’s most successful multilateral environmental agreements, having phased out 97 percent of almost 100 ozone-depleting substances (“ODSs”) — placing the ozone layer on a path to recovery later this century.

Because many ODSs are also potent greenhouse gases (“GHGs”), their phase-out under the Montreal Protocol has provided an often overlooked bonus for climate mitigation: by the end of the decade, the Montreal Protocol will have done more to mitigate climate change than the initial Kyoto Protocol reduction target, reducing emissions in terms of carbon dioxide (“CO₂”)-equivalent by 135 billion tonnes between 1990 and 2010 and delayed climate impacts — including abrupt and irreversible impacts — by about up to 12 years” (Cf. <http://www.igsd.org/montreal/index.php> also for further references).

It has also been argued that Parties to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) have several opportunities to take impacts of climate change into account, particularly when listing a species and when making non-detriment findings. It would go beyond the scope of this Chapter to make more specific reference than this and stating, that also the following regimes need at least be mentioned as having potential impacts on climate change: The Ramsar Convention on Wetlands of International Importance; the Convention on the Conservation of Migratory Species of Wild Animals, the Law of the Sea Regime (UNCLOS) and others.

Moreover, the international trade regime (GATT/WTO) is obviously strongly related to UNFCCC and Kyoto; in fact both recognise that climate change policy may provide opportunities as well as challenges for the international trading system (Wold et al., 2009). The WTO is a remarkable example of institutional evolution and its dispute settlement system is as effective as impartial. However, similar to the climate change negotiations, the so-called Doha Round of multilateral trade negotiations have been complex and so far without the aspired success. Both negotiations processes seem to be lacking the necessary consensus of the parties involved, particularly developed and developing countries. The only difference between the two negotiations processes lies in the fact that “the climate doesn’t have time for a Doha-like approach” (T Houser ‘Copenhagen, the Accord, and the Way Forward’ (2010) PB10-5 Peterson Institute for International Economics 16).

8.2.2 International human rights conventions and climate change

The efforts that have been made so far to place rights at the centre of any future climate change regime have not been human rights-focused. In fact, most international human rights instruments were drafted before the emergence of climate change as a common concern (Shelton, 2007). However, human rights impacts are a relevant aspect when formulating a common African position in the international climate change negotiations (Scholtz, 2010). In fact, “climate change prompts significant questions about justice and distribution. There is an acute need for intelligent collective action focusing on the human suffering that climate change will cause in future. On the one hand, as a matter of law, the human rights of individuals need to be viewed in terms of state obligations: it is principally the state that is responsible for human rights fulfilment. On the other hand the assignation of such responsibility to only the state seems inadequate in the context of climate change and human security” (Cf. Ruppel & Van Wyk, 2011: The Effects of Climate Change on Human Security and Human Rights in Africa, http://www.ccs.org.za/wp-content/uploads/2011/10/China_Monitor_OCT_2011_final.pdf).

To mobilise the policy value, and indeed the legal force of human rights in the construction of a climate change regime, therefore, requires the introduction of likely human rights impacts and outcomes of climate change. The specific rights potentially affected by climate change, such as rights to food, water, shelter, and health or rights associated with gender, children and indigenous peoples must be addressed in context. In 2009, the Human Rights Council adopted Resolution 10/4 (U.N. Doc. A/HRC/10/L.11) which noted the effects of climate change on the enjoyment of human rights, and reaffirmed the potential of human rights obligations and commitments to inform and strengthen international and national policy making. In that resolution, the Council welcomed the exchange of information between the Office of the High Commissioner for Human Rights (OHCHR) and the UNFCCC Secretariat, and stated inter alia that climate change and human rights are governed by international regimes that have evolved separately, with different premises underlying the legal frameworks of multilateral environmental agreements (like the UNFCCC) and human rights treaties (McInerney-Lankford, 2009).

What is remarkable is the emphasis made by Cancun Decision 1/CP.16 on a human rights oriented approach to deal with all issues relating to climate change. By

[r]ecognizing that climate change represents an urgent and potentially irreversible threat to human societies and the planet, and thus requires to be urgently addressed by all Parties [...]

and

[n]oting resolution 10/4 of the United Nations Human Rights Council on human rights and climate change, which recognizes that the adverse effects of climate change have a range of direct and indirect implications for the effective enjoyment of human rights and that the effects of climate change will be felt most acutely by those segments of the population that are already vulnerable owing to geography, gender, age, indigenous or minority status, or disability [...]

the Conference of the Parties

[e]mphasizes that Parties should, in all climate change related actions, fully respect human rights.

This human rights oriented approach to climate change can be seen as the core foundation to grant climate justice to all, as it takes into account the rights of all humans, including those particularly vulnerable to the negative effects of climate change. **Climate change is expected to have severe effects on poverty development. Therefore climate protection also plays an important role in the human rights discourse aiming to reduce poverty. Climate change policy, human rights protection and development policy should, no doubt, be more closely coupled in future.**

Moreover, there may be complementarity identifiable in principles, which can be found in both the UNFCCC regime and the International Covenant on Economic, Social and Cultural Rights (ICESCR), such as the duty of cooperation, “do no harm,” or equity. Human rights are relevant to the design and implementation of responses to climate change, whether in relation to adaptation and mitigation. One can argue that human rights can usefully inform approaches to climate change in policy and legal terms. This dimension includes arguments based on human rights obligations of states under a variety of international law instruments. These range from the integration of human rights into country strategies in terms of priority entitlements to be protected from the impacts of climate change (e.g., right to health, housing, water, or food), or more procedural human rights that are relevant to the design and implementation of policies related to climate change (e.g., right to information, participation, or access to decision making). Under this view, human rights obligations may provide a legal baseline for how climate change is tackled and what must be protected from its impacts. From this, it may be possible to identify ways in which addressing climate change can help realize human rights and how realizing rights can help ensure greater capacity to adapt to climate change, underscoring a core compatibility of aims and outcomes between addressing climate change and realizing human rights (McInerney-Lankford, 2009).

Both the International Covenant on Civil and Political Rights (ICCPR) and the International Covenant on Economic, Social and Cultural Rights (ICESCR), together with the Universal Declaration of Human Rights (UDHR), are often referred to as the International Bill of Rights. Many if not most African countries have acceded to both the ICCPR and the ICESCR. On 10 Dec 2008, the UN General Assembly adopted, by consensus, the Optional Protocol to the ICESCR. The Optional Protocol provides a mechanism through which persons can petition the UN Committee on Economic, Social and Cultural Rights about violations of their rights. This Protocol was opened for signing on 24 September 2009. Both the ICCPR and the ICESCR call on State Parties to take steps (legislative or other measures) to give effect to the rights contained therein. Most of the rights and freedoms recognised in the ICCPR are also entrenched in national constitution’s Bill of Rights. This may include, amongst others, the right to dignity, the right

to life, the right to health, the right to water, the right to legal representation, the guarantee against torture and other cruel or inhuman treatment or punishments, the protection against discrimination on any ground, and others. The ICESCR and the ICCPR provide internal protection for specific rights and freedoms. Both Covenants recognise the right of peoples to self-determination; both have provisions which prohibit all forms of discrimination in the exercise of human rights; and both have the force of law for the countries which have ratified them. States have obligations under international human rights law to address disadvantage, threats to human rights and ensure that policies aimed at limiting the effects of climate change are not implemented effectively and in ways that don't overburden or discriminate against specific vulnerable groups, e.g. women, children and indigenous people (Ruppel, 2010a; Ruppel and Ruppel-Schlichting, 2011).

The Convention on the Rights of Persons with Disabilities, establishes the principle of respect for the evolving capacities of persons with disabilities. The same applies to the Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment. It becomes obvious that both Conventions also become relevant in the context of climate change, due to the special vulnerability of persons who are at risk in situations of natural disaster.

8.2.2.1 Women

Article 3 of the ICESCR encourages States Parties to ensure the equal right of men and women to the enjoyment of all economic, social and cultural rights as set forth by the Covenant. *The Convention on the Elimination of All Forms of Discrimination against Women* (CEDAW) was adopted in 1979, and came into force in 1981. CEDAW is the first legally binding instrument relating specifically to women's rights. States Parties are obliged to take all appropriate measures, including legislation and temporary special measures, to ensure that women enjoy all their human rights and fundamental freedoms. The Optional Protocol to CEDAW adopted by the United Nations General Assembly in 1999 entered into force in December 2000. Members to the Optional Protocol recognises the competence of the Convention's monitoring body, the Committee on the Elimination of Discrimination against Women, to receive and consider complaints from individuals or groups within its jurisdiction. *The Declaration on the Elimination of Violence against Women* (1993) is a further commitment by the UN. States are called on to condemn violence against women and not invoke any consideration to avoid their obligations with respect to its elimination. Two major documents that still need to be mentioned here are the *Beijing Declaration* and the *Beijing Platform for Action*, which resulted from the UN's Fourth World Conference on Women, titled "Action for Equality, Development and Peace", held in Beijing in 1995. The Beijing Declaration embodies the commitment of the international community to the advancement of women and to the implementation of the Platform for Action, ensuring that a gender perspective is reflected in all policies and programmes at national, regional and international levels. The Beijing Platform for Action, on the other hand, sets out a number of actions for national and international implementation for the advancement of women (Ruppel, 2008, 2010c).

The vulnerability of women to climate change and natural disasters is increased for a number of reasons. Women are usually at higher risk of being placed in unsafe, overcrowded shelters, due to lack of assets, such as savings, property or land. In the context of droughts, floods and other disasters that require mobility, cultural constraints on women's movements may hinder their timely escape, access to shelter or access to health care. Exacerbating this effect, women often avoid using shelters out of fear of domestic and sexual violence, and become even less mobile as primary family care-givers. Poor women and those in countries of higher gender inequality appear to be at the highest risk: a direct correlation has been observed between women's status in society and their likelihood of receiving adequate health care in times of environmental stress. The UN has identified environmental degradation as a key threat to human security. All post-conflict countries face serious environmental issues that could undermine the peace building processes, if left unaddressed, and specifically affect women who are faced by a combination of hardships. It is thus important to identify gender-sensitive strategies for responding to human security

needs and environmental and humanitarian crises caused by climate change. These efforts should focus on: reducing women's vulnerability, in tandem with men's susceptibilities; promoting gender sensitive emergency responses; and enlisting women as key environmental actors in natural disaster management decision-making processes, alongside men, tapping on women's skills, resourcefulness and leadership in mitigation and adaptation efforts. Governments should thus be encouraged to incorporate gender perspectives into their national policies, action plans and other measures on sustainable development and climate change, through carrying out systematic gender analysis; collecting and utilizing sex-disaggregated data; establishing gender-sensitive benchmarks and indicators; and developing practical tools to support increased attention to gender perspectives (UN WomenWatch, 2009). The [Convention to Combat Desertification](#) specifically calls on its Member States to promote women's participation in decision-making policies and programmes that address desertification and drought (<http://www.unccd.int/convention/ratif/doiif.php>).

8.2.2.2 Children

The impact of climate change on the realisation of child rights shows multiple effects of climate change on basic rights such as water, food and health for children in countries vulnerable to temperature and precipitation change. For example, a child may be less able to enjoy an adequate standard of living, education and health, due to loss of livelihoods and food security resulting from increased water stress and habitat changes. Where natural disasters are becoming more frequent and intense, a child is at high risk of disrupted education, injury, forced migration and death. Children are vulnerable to climate change, existing social inequalities are being further exacerbated by climate change, and will become ever more severe unless action is taken to reduce the causes (emissions) and help communities adapt to the consequences, by using economic and social policy, cultural values, and legislative frameworks. Policy-makers at the international, national and local levels need to apply a cost-benefit analysis that values future quality of life. Adherence to the Convention on the Rights of the Child could require that national government policymakers, especially those in developed countries, ensure the fair representation of children and young people and that children's specific needs are given due consideration in adaptation and mitigation policy (UNICEF, 2009)

The Universal Declaration of Human Rights, as the most prominent and fundamental UN human rights document, provides in its Article 25 that childhood is entitled to special care and assistance. Furthermore, the ICCPR, a legally binding document, contains provisions specifically referring to children (Articles 14(1), 23(4) and 24). Also the ICESCR contains several children-specific provisions (Articles 10(3) and 13), with a focus on the right to education and protection from economic and social exploitation. Moreover, the Convention on the Elimination of All Forms of Discrimination against Women contains children-protective provisions, emphasizing that the interests of children are paramount (Articles 5(b) and 16(1)(g)).

The most prominent UN initiative to advance children's rights is the Convention on the Rights of the Child (CRC). The Convention was adopted by Resolution 44/252 of 20 November 1989 at the Forty-fourth Session of the UN General Assembly, and entered into force on 2 September 1990. To date, the Convention has 193 parties. The CRC, which consists of 54 Articles, incorporates the full range of human rights – civil, cultural, economic, political and social – and creates the international foundation for the protection and promotion of human rights and fundamental freedoms of all persons under the age of 18 (Article 1). The Convention represents widespread recognition that children should be fully prepared to live an individual life in society, and be brought up in the spirit of peace, dignity, tolerance, freedom, equality and solidarity. The CRC follows a holistic approach to children's rights, recognising that the rights anchored in the Convention are indivisible and interrelated, and that equal importance must be attached to each and every right contained therein. The Convention foresees the granting of international assistance or development aid for programmes geared at children where such cooperation is needed to properly implement the provisions of the CRC and thereby advance the social, economic

and cultural rights of children (Ruppel, 2009b).

Particularly relevant to climate change are the principles contained in the CRC Articles 2, 3, 6 and 12, covering the issues of non-discrimination; the best interests of the child; the right to life, survival and development; and respect for the views of the child. No less important in the same context are the rights contained in the CRC referring to civil rights and freedoms, containing *inter alia* the right to access to appropriate information; and the right not to be subjected to torture or other cruel, inhuman or degrading treatment or punishment. The group of basic health and welfare summarises the Convention's Articles 6, 18(3), 23, 24, 26, and 27(1)–(3), namely the right to survival and development; the right to special protection of children with disabilities; the right to health and health services; the right to social security and child care services and facilities; and the right to an adequate standard of living. In this context, national climate change related efforts to combat HIV and AIDS and diseases such as malaria and tuberculosis, particularly among special groups of children at high risk, need to be mentioned. Special protection measures are laid down providing for, *inter alia*, children in situations of emergency; refugee children; children in conflicts; children in situations of exploitation; and children belonging to minority or indigenous groups (Ruppel, 2009b).

8.2.2.3 Indigenous People

In the UNFCCC indigenous peoples in relation to climate change are not explicitly discussed. However, Article 4 calls on developed country Parties of the Convention to consider the needs and challenges that developing country Parties are facing with regard to adverse effects arising from climate change. Indigenous peoples are among the groups that are most vulnerable to actual and potential detrimental impacts of climate change. They live in the most vulnerable ecosystems so are often the first groups to be impacted by climate change. They are highly dependent on their lands and natural resources for subsistence and their cultural identity is closely associated with the environment and the lands in which they live. Environmental migration of indigenous peoples may be caused by climate change related developments, e.g. sea level rise, extreme weather patterns, floodings etc. However, indigenous peoples are tightly connected to their land through their livelihoods and spiritual bonds.

In view of the aforementioned the Declaration on the Rights of Indigenous Peoples was adopted by the General Assembly in 2007 (**Resolution 61/295**). **Therein the General Assembly**, reaffirms that indigenous peoples, in the exercise of their rights, should be free from discrimination of any kind, *recognizing* the urgent need to respect and promote the inherent rights of indigenous peoples which derive from their political, economic and social structures and from their cultures, spiritual traditions, histories and philosophies, especially their rights to their lands, territories and resources. It recognizes that respect for indigenous knowledge, cultures and traditional practices contributes to sustainable and equitable development and proper management of the environment and in particular the right of indigenous families and communities to retain shared responsibility for the upbringing, training, education and well-being of their children, consistent with the rights of the child. It further *acknowledges* that the Charter of the United Nations, the International Covenant on Economic, Social and Cultural Rights and the International Covenant on Civil and Political Rights, as well as the Vienna Declaration and Programme of Action, affirm the fundamental importance of the right to self-determination of all peoples, by virtue of which they freely determine their political status and freely pursue their economic, social and cultural development. According to **Article 1** indigenous peoples have the right to the full enjoyment, as a collective or as individuals, of all human rights and fundamental freedoms as recognized in the Charter of the United Nations, the Universal Declaration of Human Rights and international human rights law. According to **Article 29 (1)** indigenous peoples have the right to the conservation and protection of the environment and the productive capacity of their lands or territories and resources. States shall establish and implement assistance programmes for indigenous peoples for such conservation and protection, without discrimination (<http://www.un.org/esa/socdev/unpfii/en/declaration.html>).

Although the Declaration does not impose binding obligations, it can be considered as a strong step in

strengthening indigenous rights of groups and individual. In order for indigenous peoples to protect their collective interests in international law they need to establish legal capacity, which requires the following criteria: (1) the will to exist, (2) the development of institutions that assist in maintaining characteristics unique to them as a minority, (3) the development of representation and the internal acceptance of such, and (4) the external recognition of the representative (Meijknecht, 2001). It is worth noting that the Cancun decision specifically recognizes indigenous people, women, workers and other vulnerable groups.

8.2.3 African Union Commission (AUC)

The impacts of climate change on human rights have been explicitly recognised by the African Commission on Human and Peoples' Rights (hereafter African Commission). In its AU Resolution (ACHPR/Res 153 XLV09) the African Commission called on the Assembly of Heads of State and Government to take all necessary measures to ensure that the African Commission is included in the African Union's negotiating team on climate change.

The 1981 African (Banjul) Charter on Human and Peoples' Rights (hereafter African Charter) is a human rights treaty that proclaims environmental rights in broadly qualitative terms. It protects the right of peoples both to the "best attainable state of physical and mental health" (Article 16) and to a "general satisfactory environment favorable to their development" (Article 24). Article 24 of the African Charter establishes a binding human-rights-based approach to environmental protection, linking the right to environment to the right to development (Van der Linde and Louw, 2003).

In the *Ogoni* case, for example, the African Commission held, inter alia, that Article 24 of the African Charter imposed an obligation on the state to take reasonable measures to "prevent pollution and ecological degradation, to promote conservation, and to secure ecologically sustainable development and use of natural resources" (*The Social and Economic Rights Action Center (SERAC) & the Center for Economic and Social Rights (CESR) v Nigeria* (27 October 2001) (Ebeku, 2003). The *Ogoni* case is considered to be a landmark decision with regard to the effective protection of economic, social and cultural rights in Africa, particularly the protection of the right of peoples to a satisfactory environment (Ruppel, 2011a).

Article 24 of the African Charter should also be viewed together with the Bamako Convention and the first Organisation of African Unity (OAU) treaty on the environment, the Convention on the Conservation of Nature and Natural Resources, which predates the African Charter (Viljoen, 2007). The Revised African Convention on the Conservation of Nature and Natural Resources was adopted by the Second Ordinary Session of the African Union (AU) Assembly of Heads of State and Government in Maputo, Mozambique, in July 2003. It has, however, not yet come into force. The recognition of a right to a satisfactory environment by the African Charter and the progressive jurisprudence by the African Commission take up the issue of environmental protection from a human rights perspective and underline the linkage between climate change and human rights, in a modern holistic approach to one of the most burning issues in our society (Ruppel, 2010d).

Article 3 of the Constitutive Act of the AU contains the objectives of the AU, including, among other things, the promotion of sustainable development, international cooperation, continental integration, and the promotion of scientific and technological research to advance development of the continent. In the Protocol relating to the Establishment of the Peace and Security Council of the African Union, member states committed themselves to various guiding principles (Article 4), including 'early responses to contain crises situations', the recognition of the 'interdependence between socio-economic development and the security of peoples and States'. Moreover, in Article 6, the functions of the PSC are outlined as, among others the promotion of peace, security and stability in Africa; early warning and preventive diplomacy; peacemaking; humanitarian action and disaster management.

The African Climate Policy Centre (ACPC) hosted the inaugural CCDA conference between 17 and 19

October 2011 at the United Nations Conference Centre in Addis Ababa, Ethiopia. The theme for the conference was Development First: Addressing Climate Change in Africa to reflect the need for integrating development and climate policies, and emphasize the importance of an African ownership of its policy formulation and decision making process. The CCDA-I conference built directly on the African Development Forum VII, and many other forums, initiatives, and activities and outcomes of initiatives including for example the African Ministerial Conference on the Environment (AMCEN); the Conference of African Heads of State and Government on Climate Change (CAHOSCC); the UNFCCC and related instruments; the United Nations Secretary General's High-level Advisory Group on Climate Change Financing (AGF); the Global Climate Observation System (GCOS) and its sub-regional climate programme; and the Africa-EU Climate Change Partnership. The conference helped to position the ClimDev Africa programme within this evolving knowledge and institutional terrain and how best it can facilitate the interaction between the policy, research and practice. The overall objective of the conference was to establish a forum for dialogue, enhance awareness raising, mobilize effective commitment and actions through bringing together policy makers, academicians and practicing stakeholder with the aim of effectively mainstreaming climate change concerns into development policies, strategies, programmes and practices in Africa. CCDA also aimed to strengthen Africa's position and participation in international climate change negotiations with a view to ensuring adequate reflection of the continent's concerns and priorities in a post-2012 international climate change regime (<http://www.uneca.org/acpc/ccda/ccda1/index.htm>).

8.2.4 Regional Economic Communities in Africa

The marginalisation of Africa in the global economic and political decision-making systems made it for a long time difficult to make its voices internationally heard (Mutharika, 1998). The dawn of regional economic communities (RECs) in Africa can be traced back to the 1960s, when the United Nations Economic Commission for Africa (UNECA) encouraged African states to incorporate single economies into subregional systems with the ultimate objective of creating a single economic union on the African continent. In order to realise this aim, the Organisation of African Unity (OAU, predecessor of the African Union, AU) identified the need to enhance regional integration within the organisation, recognising that each country on its own would have little chance of, inter alia, attracting adequate financial transfers and the technology needed for increased economic development (Hansohm and Shilimela, 2006).

Africa has, since then, taken various steps towards enhancing the process of economic and political integration on the continent (Kouassi, 2007). The Abuja Treaty, which was adopted in June 1991, came into force in 1994. Since then, 52 out of the 53 AU member states have signed the Treaty, while 49 have ratified it. Meanwhile, several RECs have been established on the continent. At the seventh ordinary session of the AU's Assembly of Heads of State and Government in Banjul, The Gambia, in July 2006, the AU officially recognised eight such communities (Assembly/AU/Dec.112 (VII) Doc. EX.CL/278 (IX)). Alphabetically listed, these are as follows:

- The Arab Maghreb Union (AMU) www.maghrebarabe.org/en/
- The Community of Sahel-Saharan States (CEN-SAD) - www.cen-sad.org/
- The Common Market for Eastern and Southern Africa (COMESA)- www.comesa.int/
- The East African Community (EAC) www.eac.int/
- The Economic Community of Central African States (ECCAS) - www.africa-union.org/root/au/recs/eccas.htm
- The Economic Community of West African States (ECOWAS) - www.ecowas.int/
- The Intergovernmental Authority on Development (IGAD), www.igad.int/ and
- The Southern African Development Community (SADC) - www.sadc.int/.

All AU member states are affiliated to one or more of these RECs, as tabulated below:

Table 8.1: AU Member States and their affiliations to Regional Economic Communities (RECs)

AMU	CEN-SAD	COMESA	EAC	ECCAS	ECOWAS	IGAD	SADC	
Algeria	Benin	Burundi	Burundi	Angola	Benin	Djibouti	Angola	
Libya	Burkina Faso	Comoros	Kenya	Burundi	Burkina Faso	Ethiopia	Botswana	
Mauritania	Central African Republic	DRC	Rwanda	Cameroon	Cape Verde	Kenya	DRC	
Morocco	Chad	Djibouti	Tanzania	Central African Republic	Cote d'Ivoire	Somalia	Lesotho	
Tunisia	Comoros	Egypt	Uganda	Chad	Gambia	Sudan	Madagascar	
	Cote d'Ivoire	Eritrea		Congo	Ghana	Uganda	Malawi	
	Djibouti	Ethiopia		DRC	Guinea		Mauritius	
	Egypt	Kenya		Gabon	Guinea-Bissau		Mozambique	
	Eritrea	Libya		Guinea	Liberia		Namibia	
	Gambia	Madagascar		São Tomé and Príncipe	Mali		Seychelles	
	Ghana	Malawi			Niger		South Africa	
	Guinea-Bissau	Mauritius			Nigeria		Swaziland	
	Kenya	Rwanda			Senegal		Tanzania	
	Liberia	Seychelles			Sierra Leone		Zambia	
	Libya	Sudan			Togo		Zimbabwe	
	Mali	Swaziland						
	Mauritania	Uganda						
	Morocco	Zambia						
	Niger	Zimbabwe						
	Nigeria							
	São Tomé and Príncipe							
	Senegal							
	Sierra Leone							
	Somalia							
	Sudan							
	Togo							
	Tunisia							

State members of RECs officially recognised by the AU (Ruppel, 2009a).

RECs can enhance regional co-operation to collectively increase bargaining power during international climate change negotiations. It has already mentioned supra, that human rights are most relevant in the context of climate change. In the context of regional integration, Africa can generate greater voting power (Langhammer and Hiemenz, 1990). At first glance it appears that neither climate change nor the promotion and protection of human rights is within the RECs' focal range. However, all RECs have, at least in one way or another incorporated the environment and human rights into their treaties. In most cases, a general tribute can be found in the basic legal concepts underpinning RECs. The interrelationship between climate change, human rights and economic development has become closer over the past few years due to increasing discussions in the world community on the issue. Therefore, the promotion of human rights plays an important role in the process of regional integration, as envisaged by the Abuja Treaty as well as by REC constitutive legal instruments. However, the integration process faces many obstacles and challenges. The fear of losing State autonomy, the fear of losing national identity, socioeconomic disparity among members, historical disagreement, lack of vision, and unwillingness to share resources to name but a few (Ruppel, 2009a).

On the judicial side, the enforcement of rights within RECs works through the activities of regional community courts or similar institutions. Most RECs have judicial bodies that deal with any controversies relating to the interpretation or application of community law. However, the fact that many African states are members to various RECs can be regarded as a hurdle in respect of the integration process (Viljoen, 2007; Ruppel and Bangamwabo, 2008). Despite multiple costs for membership contributions and negotiation rounds, and technical problems such as the application of different external tariffs in respect of each member country and the eventual lack of identification with one specific REC (Andresen et al., 2001), the question of the concurrent jurisdiction of different judicial organs has to be addressed.

Only focusing on eastern and southern Africa, except Mozambique, all countries of the Southern African Development Community (SADC) are at the same time members of at least one other trade agreement in the region. Eight SADC members are also members of the Common Market of Eastern and Southern Africa (COMESA), four countries are members of SADC and the Southern African Customs Union (SACU), Swaziland is a member of SADC, SACU and COMESA, and Tanzania is a member of SADC and the East African Community (EAC). Various bilateral free-trade agreements as well as the membership of all SADC countries in the African Union (AU) may be regarded as obstacles to deeper integration in many respects. Such overlapping memberships are not only problematic in terms of duplication of work and costs, but also because a sub-regional customs union is envisaged by both COMESA and SADC, and it is legally and technically impossible to be a member of more than one such union (Jakobeit et al., 2005).

The question of concurrent jurisdiction of different judicial organs is a contentious issue with regard to multiple memberships, as all of the aforementioned organisations do have judicial organs, at least to some extent. The SACU Agreement provides for a Tribunal (SACU Tribunal), COMESA established the COMESA Court of Justice in 1994, the East African Court of Justice is the judicial arm of the East African Community (EAC) and the list goes on (Ruppel, 2009a, 2010e; Nwauche, 2009).

The African Ministerial Conference on the Environment (AMCEN), which so far played a prominent role in the African response to climate change (2009 Nairobi Declaration on the African Process for Combating Climate Change / UNEP/12/9), has a strong regional and sub-regional focus. AMCEN thus builds on the potential that RECs can enfold in the integration of adaptation measures into regional policies and socioeconomic development (Scholtz, 2010). AMCEN is a permanent forum where African ministers of the environment discuss mainly matters of relevance to the environment of the continent. It was established in 1985 when African ministers met in Egypt and adopted the Cairo Programme for African co-operation. The Conference is convened every second year. In the 2010 Bamako Declaration on the Environment for Sustainable Development, at the thirteenth session of the African Ministerial Conference on the Environment, the Conference's contribution in providing political guidance and leadership on environmental management to Africa since its creation in 1985 in Cairo, was appreciated.

AMCEN was established to provide advocacy for environmental protection in Africa; to ensure that basic human needs are met adequately and in a sustainable manner; to ensure that social and economic development is realised at all levels; and to ensure that agricultural activities and practices meet the food security needs of the region.

In October 2008, the Heads of States of Governments of the member states of SADC, the Eastern African Community (EAC) and the Common Market for Eastern and Southern Africa (COMESA) negotiated a communiqué on the basis of the Tripartite Partnership. Therein the Heads of State and Government representing all three regional economic communities agreed that the communities should merge into a single market in order to promote the rapid social and economic development of the region. With the 2011 Second Tripartite Communiqué the respective Heads of State adopted the following developmental approach to the Tripartite Integration process

that will be anchored on three pillars [...]: Market integration based on the Tripartite Free Trade Area (FTA); Infrastructure Development to enhance connectivity and reduce costs of doing business as well as Industrial development to address the productive capacity constraints [...].²⁰

According to the Communiqué, the Tripartite initiative incorporates 26 Countries which is almost half of the African Union with 600 million people and a Gross Domestic Product (GDP) of approximately US\$1.0 trillion. A Tripartite Free Trade Area is envisaged by 2016. Only recently the East African Community (EAC), the Common Market for Eastern and Southern Africa (COMESA) and the Southern African Development Community (SADC) have initiated discussions towards the establishment of the COMESA-EAC-SADC Tripartite Climate change programme to facilitate their long-term vision of working together. This was announced in September 2011 at the 4th Special Africa Ministerial Conference on Environment (AMCEN). The COMESA-EAC-SADC tripartite initiative is strongly in line with the overall AMCEN vision that seeks to have the whole of Africa speak with one voice at Climate change fora.

8.2.5 National Policy and Legal Framework

8.2.5.1 National Constitutions, Policy and Statutory Law

National Constitutions usually set the framework and the opportunity for revising national policies and laws. Also on national level human rights impacts of climate change can become relevant. Such impacts and outcomes of climate change are likely to affect constitutionally protected rights such as rights to life, dignity, food, water, shelter, and health or rights associated with gender, children and indigenous peoples. These must be addressed in the national context. Moreover, an effective climate change policy recognises the need to promote gender equality and equity and hence shall strive to enhance the contribution of women toward sustainable development. Women, especially those in African rural areas, particularly suffer from adverse effects of climate change. Other vulnerable groups include the poor, the elderly and other marginalised groups. In many African countries are currently in the process of formulating (or re-formulating) a climate-change-specific policy which guides the development and implementation of national climate interventions. In terms of national sectoral (statutory) legislation, if successfully implemented, these laws can lead to sustainable development, promote and effect an existing climate change policy. Apart from a climate change law and policy, a broad bundle of other national laws and policies directly or indirectly deal with climate change related effects and regulatory requirements. Such laws and policies deal inter alia with mining, water supply and sanitation, agriculture, regional planning and development, forestry, fishing, tourism, land-use planning, resettlement policy, health and many more.

²⁰ Cf. Second Communiqué of the COMESA-EAC-SADC Tripartite Summit of Heads of State and Government COMESA EAC SADC TRIPARTITE (2011) <<http://www.comesa-eac-sadc-tripartite.org/sites/default/files/documents/Communique%20of%20the%202nd%20Tripartite%20Summit%20-%20English%20-%2012.06.2011.pdf>> (accessed 19 October 2011).

8.2.5.2 Climate change policy

A national climate change policy should lay out a number of principles that ought to guide the process, while also outlining the roles and responsibilities of the relevant stakeholders to ensure the effective implementation of the policy. While climate change has the potential to side-rail development processes, the key is to prepare sufficiently and effectively and to use the threats and opportunities of climate change to lay the basis for sustainability and prosperity (Nandi-Ndaitwah, 2011).

The purpose of a climate change policy is thus to state national intention to respond to climate change in order to promote and maintain the welfare of the people. Furthermore it documents the intention to provide for a conducive policy environment to facilitate development and implementation of climate change mitigation and adaptation being the main responses to climate change. A climate change policy should envisage diminishing the threat of climate change, to advance solutions for current impacts of climate change and to promote and accelerate efforts to adapt to the impacts of climate change for the benefit of present and future generations. UN members are obliged under Millennium Development Goals (MDGs). The eight MDGs are as follows:

- ☐ Eradicating extreme poverty and hunger (MDG1)
- ☐ Achieving universal primary education (MDG2)
- ☐ Promoting gender equality and empowering women (MDG3)
- ☐ Reducing child mortality (MDG4)
- ☐ Improving maternal health (MDG5)
- ☐ Combating HIV and AIDS and other diseases (MDG6)
- ☐ Ensuring environmental sustainability (MDG7), and
- ☐ Developing global partnership for development (MDG8).

Apart from the fact, that all of the MDGs are in one way or another relevant in the context of climate change, one specific indicator of progress towards achievement of Target 9 of MDG7 is the reduction in the level of consumption of ozone-depleting CFCs. With regard to the objectives of a climate change policy it should promote development and implementation of strategies and action plans that will lower the vulnerability of citizens and sectors to impacts of climate change through the adoption and successful implementation of appropriate and effective climate change adaptation and mitigation measures. The cross cutting nature of climate change issues have ramifications for diverse activities in basically all different government ministries. A national climate change policy will thus require that many government ministries, directorates and departments work together in a coordinated manner, to ensure that response measures are holistic and properly directed, acceptable to all and carried out with a national focus (Mfune et al., 2009a, b).

In order to adapt to climate change, and to prepare adequately for the likely impacts, capacity has to be built at individual, institutional and systemic level. This will ensure that policies and laws are reviewed and harmonised to adequately address climate change issues in general, and adaptation and mitigation in particular. Further, it is important that the available skills and competencies within government are efficiently harnessed. In the light of this, stakeholder involvement requires consultation of professionals from government, NGOs and the private sector when addressing climate change and related development issues. A climate change policy should *inter alia* relate to the following:

- ☐ Mitigating climate change
- ☐ Limitation of greenhouse gases
- ☐ Pursuing low-emissions development strategies
- ☐ Making existing renewable technologies economically viable

- Use cleaner, more energy-efficient technologies
- Meet Kyoto requirement implement mechanisms
- Adaptation to climate change is required in each major sector and encompasses a range of different approaches and strategies (cf. IPCC AR4, WGII findings).
- Cooperation

Namibia, for example, has embarked in 2008 to come up with a draft national climate change strategy and action plan, which was introduced in 2009 (cf. <http://www.met.gov.na/Documents/Proposed%20Climate%20Change%20Policy.pdf>). In June 2011 Namibia's Prime Minister Nahas Angula indicated that a national policy on climate change for Namibia be placed within the global framework of political, developmental, and technological interests (cf. <http://www.namibian.com.na/news-articles/national/full-story/archive/2011/june/article/policy-on-climate-change-needs-review-pm/>). Namibia is expected to present its 2011 National Climate Change Policy later this year after its Parliament adopted it. Like Namibia, many African countries have taken similar and laudable steps in preparing themselves for climate change and the related future.

8.2.5.3 Indigenous involvement and Customary Law

Indigenous peoples have been voicing their concerns about the impacts of climate change on their collective rights as distinct peoples, and the importance of giving them a voice in policy-making on climate change at both national and international levels; further, to take into account and to build on their traditional knowledge. Customary law and indigenous knowledge should therefore be incorporated into climate change policies in order to foster the development of cost-effective, participatory and sustainable adaptation strategies (Mfune et al., 2009a, b).

Populations whose rights are poorly protected are likely to be less well-equipped to understand or prepare for climate change; they would be less able to lobby effectively for government or international action; and are more likely to lack the resources needed to adapt to expected change of their environmental and economic situation. Despite the legal influence of the ex-colonial powers, a large number of Africans still live under indigenous customary law. It regulates marriage, divorce, inheritance and land tenure, amongst other things. Thus, customary law is a body of norms, customs and beliefs. However, despite this relevance for the majority of the population, customary law has for a time been marginalised and even ignored owing to colonial rule. Customary law is a complex, dynamic system which has constantly evolved in response to a wide variety of internal needs and external influences (Hinz, 2003; Ruppel, 2010b).

In many African countries it is still the overall responsibility of traditional authorities to supervise and ensure the observance of the customary law of that community by its members. Customary law can also play an important role in the sustainable development of natural resources and the protection of biological diversity as it incorporates a broad knowledge of ecosystems relationships (Hinz and Ruppel, 2008, 2010). Thus, customary law can provide a basis for indigenous communities to address issues of poverty and food security in an increasingly global society. Moreover, incorporating customary law and indigenous knowledge into climate change policies is likely to contribute to the development of more effective adaptation strategies that are cost-effective, participatory and sustainable. After all, indigenous people have always been tasked to develop flexible mechanisms to cope with climatic conditions and their vulnerability.

8.2.6 *Gaps in institutional, policy and legal frameworks for dealing with climate change in Africa*

African governments have progressed in addressing climate change and related issues. The African Union (AU) has also succeeded in presenting a cohesive African position on climate change. However, significant gaps remain. At the regional level effectively managing consensus and divergence remains challenging. Divergent priorities among African countries threaten the potentials of the AU to wield influence in international climate politics (e.g. UNFCCC COP15 in Copenhagen, 2009) (Hoste, 2010). The AU thus needs to address divergence factors in lieu of international negotiations. The Africa group will then be better prepared when diverging circumstances threaten to disintegrate its common positions.

Integrating climate change into issues of common concern such as environmentally triggered migration and trans-boundary water management are inexistent. While the regional economic organisations such as the ECOWAS, the COMESA or the EAC provide for the movement of their citizens in their regions, ensuring access to resources for resource users (e.g. pastoralists, fishermen etc.) from neighbouring countries remain largely unaddressed. The AU (2010) has only recently published its policy framework on pastoralism, proposing among others to secure pastoralist mobility and access to sufficient rangelands. Similarly most African rivers are trans-boundary – in a changing climate context, regional agreements should not disadvantage local livelihoods as is the case in some areas, for example, in Macaneta (Mozambique) with the Inkomati River (Bunce et al., 2010).

At the national and sub-regional levels, various policy gaps exist, a major one being the sluggishness in mainstreaming climate change into all development sectors. In many African countries, a climate policy is non-existent or still in the making e.g. Kenya, Nigeria and Namibia (Republic of Namibia, 2009; Koblowsky and Ifejika Speranza, 2010; Madzwamuse, 2011). Development and climate policy run parallel and integrated development-climate policy framework is inexistent (Chuku, 2009), making it also difficult to stop the rebranding of Official Development Assistance (ODA) as climate response. Very few sectoral policies consider climate change, and need reviewing to close this gap.

The lower tiers of government need to be involved and to implement the national policies and strategies in their sub-national contexts. In countries as Nigeria where a certain decentralisation has taken place, state (sub-national) governments are setting the pace in some climate change responses. This progress may be good in the short-term but it would be better to align the sub-national policies and responses to national frameworks.

The lack of strategic visioning in addressing climate change is linked to the inexistent climate change policies. In part, a major reason for the high vulnerability of African populations is the high dependence on agriculture. Yet, no national plan addresses this issue in a strategic manner, for example by aiming to reduce the population dependent on agriculture for their livelihoods through building human capacity and skills that allow population to move to secondary economic sectors. Fewer investments exist in strategic areas such as legislature, coordination, advocacy and financial cooperation (Madzwamuse, 2011).

Many coordinating agencies handling climate change seem to lack the political authority to facilitate government-wide support (Madzwamuse, 2011). Climate change transcends the mandates of a particular ministry and should be assigned to a central organ with the political and executive authority to drive climate change responses across all of government such as a commission, the Ministry of finance and planning, the office of the president or the prime minister. The positioning of climate change in the environment sector tends to limit the public's and decision makers' understanding of its impacts and implications for national economies and undermines political commitment for prioritising and resourcing adaptation (Madzwamuse, 2011). In countries such as Mozambique, the Ministry of Planning and Development, lack clear focal points for the environment (Sietz et al., 2011). Various African governments have recognised this limitation. For example, Nigeria is about to set up a national climate change commission under the

presidency. Namibia also plans to establish a Climate Change Unit in the Office of the Prime Minister to remove the emphasis on climate change as an environmental problem and to raise its profile as one of the biggest development challenges (Republic of Namibia 2009). Such a central organ can effectively address the existing problems (also in the non-governmental sector) of institutional rivalries and clashes, exclusion, duplication of activities, inefficiency and delays in climate policy process, lack of credibility, accountability, policy coherence and coordination and policy fragmentation (Kok and de Coninck, 2008; Koblowsky and Ifejika Speranza,²¹ 2010; Madzwamuse,²² 2011; Levy, 2011).

To accelerate action on climate change presidential directives may be necessary. This recommendation draws analog from the Kenya presidential directive on gender, which within its short life span has become the document of reference for gender mainstreaming in government activities in Kenya. African governments should consider this option as a way of climate-proofing and mainstreaming climate change.

African governments should make provisions for integrating climate change responses into national budgetary allocations. Economic planners often lack guidelines on mainstreaming climate change adaptation at the national level. As with other policy spheres, climate-proofing development through integrating climate change in all policy spheres has its costs and trade-offs. Considering the chronic understaffing and under-funding of certain government activities, climate change will bring more work and governments should improve staff skills and provide more resources to address the add-on challenges of climate change. Many operational limitations hinder implementation. They include, dysfunctional organisational arrangements causing conflicting and overlapping mandates, overburdening reporting requirements of various international agreements and conventions, and inability to retain skilled staff (Sietz et al., 2011; Madzwamuse, 2010, 2011).

As many African countries adopt a development first strategy, it is critical to implement it in a sustainable manner. Concentrating adaptation and mitigation on priority development sectors such as the oil sector in Nigeria, the energy sector in South Africa, the tourism sectors in Kenya and Tanzania, or generally agriculture, needs to be balanced with responses in other sectors. The energy sector is one of the major sectors contributing to greenhouse gas emissions worldwide – this is also the case in certain African countries such as South Africa. Yet the importance of achieving energy security has favoured the South African decision to invest in the coal-fired Medupi power plant at the cost of increasing its emissions (Rafey and Sovacool, 2011). South Africa thus risks a policy trade-off between its energy- and climate policy (Pegels, 2010). Economic development priority and energy security seem also to have been traded for environmental sustainability and led to a public debate on the “climate debt” of South Africa. How to address trade-offs in climate responses between economic sectors and the procedures to follow remain unaddressed in policy (Chuku, 2009; Ifejika Speranza, 2011). In adopting a development first strategy, African countries should follow a low-emission path, and where untenable, devise strategies to address their future climate debt.

Cross-cutting issues such as HIV-AIDS, chronic food insecurity, gender inequality, persisting poverty and energy poverty and their inter-linkages with climate change need to be better explored to harness their synergies and reduce trade-offs.

Sufficient attention on how national climate policies and responses might play out at local levels to increase or erode the adaptive capacities of local populations is needed. Trade-offs exist in monetary terms for example between policies on cleaner energy use and income losses for producers: In Kenya, Tanzania, Mozambique and Zambia, where most households use wood-fuel or charcoal for cooking, charcoal production is a livelihood to a high proportion of their populations. Hence, without accompanying measures, cleaner energy policies will destroy such livelihoods, thereby undermining efforts at poverty eradication (Chuku, 2009). As the rural poor are often excluded from policy-making,

²¹ In a study of the Nigerian climate change policy process

²² In an evaluation of the state of preparedness for climate change adaptation in seven African countries namely Botswana, Kenya, Nigeria (with references to Ghana), South Africa, Tanzania, Uganda, and Zimbabwe.

the gap between individual adaptation actions and national policy-making processes often results in policies and institutions that rather increase vulnerability by undermining rural livelihoods and local adaptation strategies (Bunce et al., 2010; Chikozho, 2010). Macro-economic investments such as on tourism, commercial forestry and agriculture for export tend to displace local landowners and resource users leaving them more vulnerable to climate change impacts (Murombedzi, 2007; Taylor, 2009; Nelson, 2010; Madzwamuse, 2011). Policies should thus provide guidelines for dealing with cases where climate change responses may reduce greenhouse gas emissions but cause a loss of local livelihoods.

Weak research-policy-linkages means that solutions to various climate change problems remain on the shelves. African countries already support their hydro-meteorological services to improve the quality of collected evidence on climate change. Research can also contribute in various other ways, for example in vulnerability assessments for identifying adaptation priorities. However, the link between research and policy remains poor. Pathways through which researchers can reach policy makers are few to inexistent and the contributions that science makes largely remain unharnessed. There is no umbrella body guiding and prioritising research work, leading to misfit of research priorities with national knowledge gaps and dependence on individual researcher initiatives. The ensuing research results are not adequately disseminated leading to duplication of efforts and the lack of finances and technologies for research further compound the situation. It is thus necessary that specific mechanisms be established to address this shortfall. African governments need to direct substantial funding to research on issues, which they deem to be important or collaborate better with foreign initiatives in order to integrate their research priorities. Climate change is also hardly integrated in the education curriculum, exceptions being in South Africa through its integration in the secondary school curriculum in 2006 (Mokeleche, M., 2009). Education ministries in other African countries like Mozambique lack clear focal points for climate and environment issues (Sietz et al., 2011). Government officers also need to be better able to articulate climate change issues, its impacts on their sectors, the possible responses, and how they can take advantage of the opportunities that climate change offers.

There is still a need to improve the awareness of the African public on climate change in a way that they effectively understand and respond to it. Awareness raising and promoting policy change has been mainly at the national level (Levy, 2011²³), but sub-national and community levels have received lesser attention. The role of the media and communication in supporting this intervention needs consideration (BBC WST, 2010). Moreover, many climate change terms are in English, a language that local people are not conversant with, hence African governments need to make provisions for translating global climate change terms to local language terminologies as people respond better to issues when they understand it and can talk about it (BBC World Service Trust (BBC WST) on Africa Talks Climate²⁴; BBC WST, 2010a, b, c, d, e, f, g, h, i, j, k). Awareness raising needs to be more differentiated and tailored to particular actor categories, especially, the rural population that directly depend on natural resources for their livelihoods and to local government administration that seem to have been neglected by activities at national levels (BBC WST 2010). Creating platforms for inclusive public debates on climate change will also increase public understanding of climate change.

Policies on biofuel production are largely inexistent, although biofuel production is increasingly gaining attention in Africa. There is a dearth of studies on what such a low-carbon strategy entails for African governments and the livelihoods of its peoples (cf. Mshelia et al., 2010). The question of how far African countries have considered the opportunity costs and risks inherent in broadly embracing biofuel production remains unanswered. Prominent among biofuel initiatives is the EU–Africa Energy Partnership. Charles et al., (2009) argue that it is uncertain, whether the Energy Partnership will be truly mutually beneficial for sustainable transport fuel production and use in the long term, especially for sub-Saharan African nations currently investing heavily in the biofuel industry, or those intending to do

23 Studies in Burkina Faso; Cameroon; Congo; Ethiopia; Gabon; Ghana; Kenya; Lesotho; Malawi; Mauritius; Morocco; Mozambique; Namibia; Niger; Nigeria; Rwanda; Sao Tome and Principe; Senegal; Tanzania; Tunisia
 24 From surveys in DR Congo, Ethiopia, Ghana, Kenya, Nigeria, Senegal, South Africa, Sudan, Tanzania, Uganda

so. Points of reflection include the dependence on external sources for technology transfer, the danger of shifting vast stretches of arable land from food production to the cultivation of cash-crops (Anderson and Fergusson, 2006), the association with an increase in food prices (Bwibo and Neumann, 2003); and dependence on food imports leading to an increase in national debt (Bourguignon, 2004). Certain project developers and NGOs already exploit the policy vacuum on bioenergy in some countries and have convinced small-scale farmers to shift to growing bioenergy feedstock without actually securing them markets.

Designing policies for dealing with climate change offers the opportunity to address the dichotomy between parallel regulatory systems, i.e. the traditional and the state laws, e.g. in access to land, the management, use of and control over natural resources and benefit sharing. However, issues remain on how to develop a national framework for compensating natural resource users for providing environmental services and how to proceed with a low-carbon development and the role of green transformation in these processes.

Finally, institutional barriers limit mainstreaming. For instance, despite a supportive legislative environment and climate awareness among donors, the limited institutional capacity in Mozambique restricted mainstreaming initiatives (Sietz et al., 2011). Governments need to address factors such as inadequate human resources, limited incentives in the national public sector, insufficient data and information and their management and dissemination, as well as the erosion of institutional memory due to inability to retain skilled staff.

8.2.7 Conclusion

The international climate change regime is growing, however, in order to achieve more climate change justice for Africa it requires that certain gaps are closed and rights and responsibilities are distributed with greater fairness in future. This in turn means to ensure that especially poor and marginalised communities in Africa do not suffer a disproportionate burden associated with climate change. Climate change calls for more intelligent collective action focusing on the human suffering that climate change is expected to cause, especially in Africa.

The former executive Director of the United Nations Environmental Programme (UNEP), Klaus Töpfer once stated, that sustainable development cannot be achieved unless laws governing society, the economy, and our relationship with the Earth connect with our deepest values and are put into practice internationally and domestically. The problem with climate change, however, continues to lie in that such laws must be enforced and complied with by all of society, and all of society must share this obligation. In this context the question that still needs to be answered, or perhaps better negotiated is this: How can the law work for everyone equitably (developing and developed countries), combat climate change, reduce poverty, retain wealth and at the same time protect the environment? (Ruppel, 2011c). It is to be seen what the negotiations can achieve in answering the aforementioned question.

At COP 16 in Cancun, a goal of limiting global temperature rise to below 2°C above pre-industrial levels, with a provision to review the adequacy of this goal at a subsequent date, was agreed upon. However, an emissions gap exists between the current pledges and what is needed to keep average temperature increase to 2°C or lower. Africa's agreed position – along with over 100 developing countries including Least Developed Countries (LDCs), Small Island States (SIDs) and others – is for the adoption of a global goal of limiting warming to well below 1.5°C.